Gender and Other Differences in Health:
Findings from Urban and Rural Sites in Lahore and Bahawalnagar, Pakistan

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Declaration

Except where indicated, this thesis is my original work carried out during the tenure of a PhD scholarship at the Australian National University from 1996 to 2000

Muhammad Hafeez

September 2000

This thesis is dedicated to my brother

Muhammad Rafiq

for encouragement throughout my life

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Abstract

Gender and Other Differences in Health: Findings From Urban and Rural Sites in Lahore and Bahawalanagar, Pakistan

The social production of health and illness is receiving increasing attention from researchers, and the recent literature on health inequalities has increasingly recognised the importance of social and structural conditions in producing health disparities among different groups of people. Gender is an important stratifier and manifests itself in health differences between males and females. The impoverished health infrastructure of Pakistan adversely affects the health of both sexes, but females are more vulnerable owing to their lower social status.

Gender structures influence the health of both sexes in Pakistan, but appear to impair the health of females more than that of males. These structures vary in different parts of the country, and accordingly have varying influence on people's health. This research attempts to analyse the structural of gender on the health of men and women. To this end, gender differentials in health in urban and rural sites in the districts of Lahore in Central Punjab and Bahawalnagar in Southern Punjab are analysed. Lahore is a metropolitan district with 83 percent of its over 6 million population urban. Bahawalnagar contains nearly 2 million people, but only one-fifth of that population is urban.

The analysis suggests that different sorts of gender structures operating in the two districts and in urban and rural areas produce different patterns of health among males and females. Women in general assess their health as poorer than men assess theirs. With increasing age people tend to assess their health as poorer. Among both men and women, education has a positive effect, reducing the odds of reporting 'fair-to-poor' health. Household morbidity in general is higher among females than males. Although preventive health care like immunization does not show significant gender differences, curative health care services use does show significant differentials between male and female children. Mortality is higher among male than female infants because of their different genetic make-ups, but differential use of curative health services by male and female children probably explains higher female than male mortality among children aged 1-4 years.

Contents

LIST OF TABLES

LIST OF FIGURES

APPENDIX TABLES

Glossary of Acronyms

DHQ	District Headquarters Hospital
ESCAP	Economic and Social Commission for Asia and Pacific
FBS	Federal Bureau of Statistics
FGD	Focus Group Discussion
GDI	Gender Development Index
IMR	Infant Mortality Rate
MHDC	Mahbub ul Haq Human Development Centre
MIMS	Maternal and Infant Mortality Survey
MMR	Maternal Mortality Rate
NHSP	National Health Survey of Pakistan
NIPS	National Institute of Population Studies
PCPS	Pakistan Contraceptive Prevalence Survey
PDHS	Pakistan Demographic and Health Survey
PIDE	Pakistan Institute of Development Economics
PFFPS	Pakistan Fertility and Family Planning Survey
PIHS	Pakistan Integrated Household Survey
PMRC	Pakistan Medical Research Council
RCIW	Report of the Commission of Inquiry for Women
TFR	Total Fertility Rate
UNICEF	United Nations Children's Fund
WHO	World Health Organization

Chapter 1

Introduction

1.1 Introduction

This research addresses two central issues. First, it identifies some regional, urban-rural, and male-female differences in health and the utilization of health services by males and females in two regions of Pakistan. Second, it examines ways in which these health disparities are produced, particularly the mechanisms through which male-female health inequalities are shaped and perpetuated. Substantial health disparities between regions, urban and rural populations, and the two sexes are anticipated in Pakistan. Regional disparities normally are explained in terms of unequal levels of regional development, while urban-rural health variations typically are attributed to differential poverty and unequal provision of health services. However, justifications for poorer female than male health generally focus on women's reproductive biology. Lay people, health professionals and policymakers often attribute poorer female health to women's reproductive function, whence it is deemed 'natural'. While the childbearing function does contribute to female morbidity and mortality, sex differentials in health are largely gender-based, not a consequence of reproduction. Consistently higher reported mortality among girls than boys in the age category 1-4 years is a clear pointer in this direction (NIPS 1992, Arnold 1997, Hakim et al. 1998, Tinker 1998). According to Davar (1999), gender is a 'risk factor' for female health in the South Asian context.

Population health status is complex and dynamic, shaped by social, economic and ecological circumstances (Robert and House 2000). The physical environment (climate, rainfall, and terrain) influences people's health (Bhasin 1994:29). Socio-economic, cultural, and biological factors are also linked with differential health statuses of populations (McCarthy and McCaine 1992). The quality and quantity of medical services, too, play a role in shaping the health of communities (Zahid 1996, Midhet et al. 1998, Ahmed et al. 2000). More importantly, however, prevalent social processes determine psycho-social and health-related behaviours, resulting in different health outcomes among groups (Beck 1992, Evans et al. 1994, Wilkinson 1996, Zaidi 1996, Mechanic 1999, McMichael 1999).

Gender and gender systems are socially constructed. The gender division of labour at home and in public, and allied institutional practices, reinforce male domination and female dependency. In essence, gender refers to differences between men and women created by local social systems and structures (Brydon and Chant 1989, Evans et al. 1994, Doyal 1995, Bielby 1999). Gender differences, basically, are constructed over biological differences between men and women. Although there is a distinct difference in reproductive function between men and women (Lindsey 1994), this sex difference is widened by an accumulation of gender-based differences. These socio-cultural differences create distinctive life conditions for men and women, producing undue health differences between them. For example, son preference and discriminatory health care practices are reported to produce differential survival risks between males and females (Das Gupta 1987, Caldwell and Caldwell 1993, Kishor 1993, Vlassoff 1994, Das Gupta and Bhat 1995, United Nations 1996). If gender differences were based merely on reproductive functions, they should exist only during motherhood. On the contrary, however, gender differentials in health are found in almost all age groups.

Against the background of the prevailing socio-cultural environment, the aim of this research is to highlight some of the health inequalities between two regions of Punjab, Pakistan, and between urban and rural areas, and males and females in these regions. The primary focus, however, will be on gender-based health differences, and especially the situation of females, and an attempt will be made to uncover the underlying social processes that produce these health disparities between men and women.

1.2 The Status of Females in Pakistan

The status of females in Pakistan is extremely low. This low status is institutionalized by the country's patriarchal social system. At birth, the girl child is accepted quietly or mourned, while the birth of a son is cherished and celebrated by distributing sweets. Thereafter, girls and women are systematically made dependent on men for access to resources and social support.

Family is a fundamental social institution in Pakistani culture, and the basic source of social security, especially for females. Due to the absence of state institutions, the institution of family looks after the personal and social needs of children (both male and female), including education, health care, and protection

needs. Female children, however, are excessively dependent upon male members of their families for their various culture-specific needs. For example, young female children usually need a male escort to go to school or to go shopping. Due to the difficulties of arranging regular male escorts, some parents just withdraw them from school and do not allow them to go out shopping or for other needs.

Females are socialised so as to internalise a status that is inferior to that of their male counterparts. This socially ingrained inferiority perpetuates girls' dependence on males throughout their lives. For example, females are discouraged from seeking employment. To seek wage work, they usually need permission from their father, brother, or husband. They cannot take independent decisions. Such a situation creates an extreme economic dependence of women on men. Women are discouraged from venturing outside the home, except in the company of (usually male) close relatives (brothers or fathers) or their husbands (if married).

At home, females (especially young girls) are not usually allowed to interact with unrelated male visitors. They are expected to remain out of sight while visitors are in the home. Moreover, parents do not normally leave their young daughters alone at home, but occasionally they have no option but to do so. Such situations are observed uneasily by relatives, friends and neighbours. The girl is considered a potential source of family dishonour, having opportunity to develop relations with unrelated males. Even if she is not involved with an unrelated boy, any opponent of the family can use such a situation to malign her family by spreading a rumour of her involvement in such relations.

The maintenance of female chastity and good reputation is vital. Parents are willing to spend scarce economic resources on protecting the purity of their daughters. Thus, in urban Lahore, evidence was found of money being spent on daughters commuting to school over distances sons walked to school. This culture-specific need for protection of females makes them overly dependent on males. They are systematically made dependent upon men for their personal and social security.

For a girl to have a virtuous reputation is critical in arranging a suitable husband for her. To maintain girls' reputations, separate spheres of activity are defined for men and women. This gender-based separation of activities is reinforced both at home and in public. Men are expected to work in public and generate economic resources for the family, and women are supposed to look after children and household operations. They are not expected to seek employment in the male-

dominated sphere of public life. In general, women are discouraged from indulging in activities that bring them into contact with unrelated men. Their appearance in public, even to acquire education or health care, much less to undertake employment, may trigger suspicion and adverse comment due to the possibility of their interacting with such men. This suspicion can influence family honour negatively, and often does.

Marriage is another important social institution in Pakistan. Sexual relations out of wedlock invite serious social and legal sanctions. Marriage incurs major expense, for which young men and women are dependent on their parents. As Pakistani social structure does not normally allow young girls to undertake wage work, they in particular are heavily dependent on men (their fathers and/or brothers) for making arrangements for them to marry. After marriage, they are dependent on their husbands, and should divorce or widowhood occur, they rely on their fathers, brothers, or sons. The socio-economic dependence of women on men creates a vicious cycle that is difficult to break out of in a traditional, rigid social structure like that in Pakistan.

The patriarchal system of Pakistan is reinforced by selective use of religious injunctions that perpetuate the subordination of women and their dependence upon men. For example, a woman is not allowed to go on a *Haj* (a pilgrimage to Mecca) except in the company of a *Mehram* (male relative). The highly influential and internationally renowned Pakistani religious scholar Maulana Maududi advocates the complete segregation of women from mainstream male-dominated society. In relation to the protection of chastity, two standards are maintained, one for men and another for women. The Quran (the Holy Book of Muslims) sets the same standards of modesty with respect to one's private parts and maintenance of virginity for both sexes. But religious scholars have discounted the capacity of women to protect their own virtue (Kazi 2000), and accordingly promote segregation of the sexes.

The status of women does vary at different stages of their lives. They earn status on becoming mothers, especially of sons, and older women enjoy more freedom of movement and another rise in status when their children, especially sons, marry. But in general, girls and women spend their lives dependent on their fathers, then their husbands, and if widowed, ultimately their sons.

The situations of women also vary by geographical location, social class, and local normative structure. The rigidity with which cultural norms are practised is dependent upon where a woman lives, and her social class, age and cultural heritage

or ethnicity. Women fare better in urban than in rural areas, and women from the middle and upper-middle classes enjoy better status due to greater opportunities for education and professional employment. The physical mobility of these women is also less restricted. However, nearly three-fourths of women in Pakistan live in poor conditions, mostly in rural areas. Similarly, three-fourths are illiterate and remain structurally disadvantaged due to lack of skills and limited awareness about suitable employment opportunities. These illiterate, poor rural women are labelled and treated as second-class citizens because of legal and social discrimination located in local normative structures (HRW 1999:18). The nature of cultural norms varies geographically. Local cultural norms in South Punjab, for example, are considered more discriminatory against women than are those in Central or North Punjab. Accordingly, the status of women in South Punjab is in general lower than that of their counterparts in North or Central Punjab.

The socio-cultural environment and the institution of family are important sources of physical and mental health for both men and women. Both provide social support and thus contribute towards good health, and both, sometimes, are hazardous, having detrimental effects on physical and mental health. For some Pakistani women, mostly from higher socio-economic strata, family and social structure provide a supportive environment. These women are at liberty to either work or not work, both domestically and in public. They are under no obligation to work for a living, and may have personal servants to ease their daily routines and thereby, perhaps, provide them with physical and psychological support. On the other hand, the vast majority of women are under considerable pressure, due to poverty, overwork, excessive childbearing, and a lack of leisure time. Most women from the low and lower-middle socio-economic classes are so domestically overburdened that they have little or no spare time to relax and regain energy. On the other hand, men, by virtue of their role in public life and relatively limited participation in routine household operations, have regular opportunities to relax. In many segments of Pakistani society, moreover, leisure activities are considered culturally inappropriate for women. Outdoor sports are generally the domain of boys and men, and women are expected to pursue only indoor activities. In such social circumstances, Pakistani females are at a disadvantage with respect to participation in health-producing leisure pursuits.

The cultural structures and expectations of some families are harsh. For example, dowry-related pressures on young married women sometimes lead to so-

called 'kitchen deaths'[1] (HRW 2000). Similarly, some families tend to treat their female members rather repressively. Young brides, for example, usually are considered an addition to the household's labour force, and are often assigned excessive domestic work. Such over-burdened home environments become hazardous and injurious to women, both physically and mentally.

1.3 Regional Health Differentials

The four provinces in Pakistan display substantial socio-economic variation. Punjab Province is the most prosperous and Baluchistan is the most underdeveloped. The former contains three-fifths of the country's over 130 million population, while the latter is geographically the largest province, but is home to only five percent of Pakistanis. The North West Frontier Province (NWFP) contains over 13 percent and Sind Province 23 percent of Pakistan's people (Government of Pakistan 1998a). Infant mortality rates range from 69 deaths per thousand live births in North-West Frontier Province to 91 in Sind, 97 in Punjab and 106 in Baluchistan. Under-five mortality in Punjab is 115 deaths per thousand live births compared with 86 in NWFP, 109 in Sind, and 142 in Baluchistan (Hakim et al. 1998:178). The nutritional status of children also shows substantial variation across provinces. According to weight-for-age data from the Pakistan Demographic and Health Survey (PDHS) (NIPS 1992:164), 37 percent of children aged 0-4 years were underweight in Punjab, compared with 38 percent in NWFP, 48 percent in Sind, and 56 percent in Baluchistan. In short, substantial health variations are evident across provinces in Pakistan.

The geographic variations are not, however, confined to provinces. They also exist between regions, districts, large and small towns, and communities. Within each province, different districts exhibit distinct socio-economic levels. The Pakistan Institute of Development Economics has ranked all 94 districts of Pakistan by social development status as measured by various health and education-related indicators

[1]'Kitchen deaths' (also called stove deaths) refer to murders of women by their in-laws. Typically, kerosene is sprinkled on a woman and she is set alight. Often these women die due to severe burns. Their deaths usually are blamed on faulty stoves and are recorded as accidents. Typical reasons for such murders are a lack of dowry and suspicion of illicit sexual relations with another man.

(PIDE 1996). The study found substantial differences across districts. The Z-sum[2] score range from 33.78 for Lahore (the most developed) to 12.62 for Kohistan evidences enormous development variation. Another technique, the Weighted Factor Score, used in the same study, ranked Karachi as the most developed, and Lahore the fourth most developed District. The specific detail of these techniques is not important here, but both show enormous inter-district development variation. This diverse socio-economic development status has produced associated health inequalities. A study conducted in 16 districts of NWFP and Baluchistan showed significant inter-district health differentials (Midhet et al. 1998).

1.4 Urban-rural Health Differentials

The health disparities between urban and rural areas are as large as the regional discrepancies. During 1992-96, under-five mortality in urban Pakistan was 83 deaths per thousand live births compared with 120 in the countryside (Table 1.1). Similarly, infant mortality in cities was 74 deaths per thousand live births compared with 98 in villages. Among urban areas themselves, substantial variations are reported between large urban centres and other urban areas. Some 59 infants per thousand live births died in major urban areas, while 90 children per thousand live births did not reach their first birthday in other urban areas. Neonatal mortality in rural areas is reported to be higher than in urban areas (Hakim et al. 1998). Mortality among children aged 1-4 years in major urban areas is nearly four times lower than in other urban areas. According to the 1991-92 PDHS (NIPS 1992), 12 percent of urban children aged under-five years were reported to have coughing and breathing problems, compared to 17 percent of their rural counterparts.

Variations in health between urban and rural areas are reflected in other indicators of health as well. According to the National Health Survey of Pakistan (NHSP) (PMRC 1995:88), among women aged 15-44 years, 47 percent of rural and 44 percent of urban women were anaemic. Similarly, among all age categories except 25-44 years, a greater proportion of rural than of urban men were anaemic. Poverty in rural areas is pervasive, and females, the young, and the old probably are more vulnerable because of low productive contribution. On the other hand, men aged 25-44 years are productive and probably have greater access to nutritious foods. Family,

[2] The Z-sum technique sums for a particular district its Z-score on each indicator. The Z-score is a standardized variable, with zero mean and unit variance. The higher the Z-sum, the more developed the region.

as a social institution, carefully looks after the needs of productive men of the household.

Table 1.1 Infant and child mortality per 1000 live births by urban-rural residence, Pakistan 1992-96

	Neonatal (NN)	Post Neonatal (PNN)	Infant ($_1q_0$)	Child ($_4q_1$)	Under-five ($_5q_0$)	Number of Births
Total Urban	44	32	74	9	83	2393
Major Urban	30	30	59	4	63	619
Other Urban	57	34	90	15	104	1774
Rural	58	42	98	25	120	5945

Source: Hakim et al. 1998:178

Regarding overall self-assessed health status, more than twice the proportion of rural compared to urban women in the NHSP reported their health status as 'poor'. On the other hand, a larger proportion of urban than of rural men rated their health 'poor', although at ages 25-44 years there was no difference in men's self-assessed health (PMRC 1995:39).

Immunization is linked with child survival (Khan 1993). Variations between urban and rural infant and early childhood mortality rates may also be viewed in the context of differential immunization patterns. According to Zahid (1996), "With respect to infant mortality, those infants who [were] not immunized experienced a mortality level 1.4 times than that experienced by children who [were] completely immunized". In 1991-92, nearly 84 percent of urban children under two years of age had received BCG immunization, compared with 63 percent in rural Pakistan. Similarly, in respect of other child immunizations, larger proportions of urban than of rural residents reported immunization of their children (NIPS 1992).

The literacy rate among people aged 10 years and over in rural Pakistan is little more than half that in cities, 34 percent compared to 67 percent among urban populations (Government of Pakistan 1998c). Education is an important variable in community-based health dynamics, and literacy rates vary substantially between urban and rural areas (Caldwell 1979, Mahmood and Nayab 1998, Agha 2000).

Poverty is pervasive in the countryside, as most rural residents are peasants and menial workers. According to the 1996-97 report of the Economic Survey of Pakistan, the rural "socio-physical infrastructure is suffering the most serious shortfalls" (Government of Pakistan 1997:142). Statistics for the year 1992-93 show that the average rural household income was 3070 rupees per month, while it was 4976 rupees for urban households, 62 percent higher (Government of Pakistan 1997:7).

Most villages lack civic amenities like water and sanitation, and have low access to schooling and health facilities. According to the Mahbub ul Haq Human Development Centre (hereafter the MHDC) (1999:199), data for 1993 show one doctor for every 1923 people nationally, but the distribution is highly skewed in favour of cities (Zaidi 1988, Mubarak 1990). According to 1982 data there was one doctor for 1801 persons in urban areas compared with one doctor for 25,829 persons in rural areas (Zaidi 1988:19, Mubarak 1990:104). More recent data could not be located, the Pakistan Economic Survey of 1996-97 providing data on doctors per thousand population for the years 1961 to 1996, but no urban-rural breakdown. These figures show more than a fourteen-fold differential in the provision of doctors to urban and rural populations. Skewed provision of health care services is expected to produce health inequalities among populations (Harriss 1989, Booth and Verma 1992, Jejeebhoy 1997).

The National Health Survey of Pakistan (PMRC 1995:6) reports that government doctors provide only 21 percent of health care in Pakistan. According to a safe assumption, 85 percent of all Pakistani doctors are located in cities (Zaidi 1988:19), so it can be argued that doctors are scarce in rural areas. While more than two-thirds of the population live in villages (Government of Pakistan 1998a), only 30 percent of private health care services and 15 percent of doctors are situated in rural areas. In such a skewed health care delivery system, rural populations are bound to suffer. In short, urban-rural socio-economic disparities are stark.

1.5 Male-female Health Differentials

While poverty and a weak health care system adversely affect the health of both sexes, females face additional health risks due to their reproductive function and low social status (Sathar and Desai 1994, Alam 1995, World Bank 1996, Tinker 1998). The present estimated total fertility rate of 5.1 in Pakistan (UNICEF 1999) is

higher than in any other large Asian country. According to the Pakistan Contraceptive Prevalence Survey (PCPS) of 1994-95, the TFR was then 5.6. Although it has declined since the mid-1980s, it continues to put pressure on the socio-economic resources of the country (Sathar 1993, Population Council 1998). High fertility is accompanied by high infant and child mortality (Alam and Cleland 1984, Caldwell and Caldwell 1993). It also underpins a maternal mortality rate of 340 per 100,000 live births which compares, for example, with 140 per 100,000 live births in Sri Lanka (UNICEF 1998). Indeed, the MMR in Pakistan may actually be higher than is usually estimated in the literature, because causes of death are not usually recorded accurately. That may be why UNICEF stopped reporting the MMR for Pakistan. The 1999 UNICEF report did not give a MMR for Pakistan, while it gave rates for other South Asian countries (UNICEF 1999). "Women hold the key to improvements in health indicators" (Abbasi 1999), and a reduction of fertility is vital for improving national health.

Nearly 40 percent of Pakistani women, compared to 21 percent of men, are anaemic, and overall morbidity is higher among women than men (PMRC 1995). Until the 1980s, female life expectancy at birth was one year lower than men's, against the world norm of higher female than male life expectancy at birth (World Bank 1989). Recent reports suggest that female life expectancy has improved and is now on a par with that of men at 63 years (UNICEF 1998:112). The sex ratio remains at 108 males per 100 females (Government of Pakistan 1998a).

As already noted, Government outlets provide only 21 percent of health care in Pakistan (PMRC 1995). Private health care is expensive, and both males and females from low socio-economic backgrounds suffer because of the high cost of private health services. Females, however, because of their lower social status, suffer greater deprivation of health services. Secondly, health services are generally staffed by men, and owing to the practice of seclusion, many women are reluctant to contact male health service providers. Despite these socio-economic and cultural factors, male-female health disparities are often explained away by painting them as a product of 'biological' or 'natural' determinism.

A disturbing but generally ignored area of women's health, especially in developing countries like Pakistan, is violence against women (Heise et al. 1994, Akhtar 1996, Bunch 1997, Stronks et al. 1998, WHO 2000a). Injuries and accidents are important facets of public health in developing countries like Pakistan. According

to a high profile report of the Government of Pakistan, "the divorce rate [has] been sharply rising in recent years. Domestic violence against women [is] widespread. Other forms of violence, especially rape and gang-rape, including [the] incidence against minors, [have] been on the increase" (RCIW 1997:vi). Household violence against women is considered a private, domestic affair, and is generally ignored. Judicial and police attitudes are not much different from those of the lay public.

Although domestic violence against women is quite common, it carries a severe social stigma. Both men and women generally feel ashamed of marital abuse, although some men may feel good about it because of *machismo*. People do not like to talk about the issue in public, and because of this social sensitivity, field research is very difficult. There are no systematic data to substantiate the extent of the problem, but a recent survey conducted in rural areas of Punjab Province found that more than one-third of women admitted to ever being beaten by their husbands (Sathar and Kazi 1997). This figure is likely to be an underestimate, as many women are averse to talking about family violence through to shame, loyalty to their husbands, or fear of retribution.

In summary, substantial disparities in health are found among populations, and between males and females. Equitable provision of health services to males and females would help diminish health inequalities, but only to a limited extent. The critical factor for health improvement is to address deep rooted socio-cultural biases against females. To explore these health differentials and their dynamics, research was initiated in which data were collected from men and women from selected urban and rural sites in two regions of Punjab Province.

1.6 Survey Sites and Data

Ideally, to obtain a nationally representative sample, one would have liked to conduct a large-scale survey covering all regions of Pakistan. Such a project, however, requires huge resources, so given the limited means available for this PhD project, a cross-sectional survey of households in two Districts of Punjab Province was conducted during January to March, 1998. Both men and women from urban and rural communities in the two Districts were interviewed. There were thus four survey sites defined by district and urban-rural residence.

The Punjab, Pakistan's most populated province, has wide socio-economic and health status diversity. Data were collected from the Districts of Lahore in central, and

Bahawalnagar in southern Punjab. The former District is one of the most developed in Pakistan, with a population of 6.2 million. The urban component of this population is 83 percent, while Bahawalnagar District is largely rural, with only 19 percent of the District's 2.0 million people living in urban Bahawalnagar. The sex ratio in Bahawalnagar District is 107 males per 100 females, while it is 111 in the District of Lahore (Government of Pakistan 1998b).

In socio-economic ranking, Lahore District was rated number one while Bahawalnagar was ranked 46 in a 1996 study conducted by the Pakistan Institute of Development Economics in Islamabad (PIDE 1996). To calculate 'Z' scores for ranking the 94 districts of Pakistan, health, education, and school enrolment by gender were used (see Table 3.1 in Chapter 3). In line with this district scaling, the present survey revealed a high income and education disparity between the two Districts. Regarding income, one-half of the Lahore respondents reported monthly incomes of 5000+ rupees compared to one-fourth of the Bahawalnagar respondents. In terms of education, the average schooling among Lahore respondents was 10 years while Bahawalnagar respondents averaged eight years at school. Against such a comparative socio-economic picture of the two Districts, it is not surprising that the death rate was more than three times higher in Bahawalnagar than in Lahore.

The data gathered were from two sources: a household survey and a series of focus group discussions with men and women from both urban and rural areas of the two districts. To supplement this information, several doctors were interviewed in all four survey sites and data from hospital records were gathered. Survey respondents from some households were mothers, and from others were fathers. The questions asked elicited demographic, socio-economic, and health information on them and their families. Several questions were aimed at collecting information on gender structures (for questionnaire see Appendix A).

The survey data are used for the bulk of the analysis, while the qualitative data from focus groups and from doctors are interwoven with the survey information to highlight the effect of deep-rooted socio-cultural factors affecting health. Although the sites selected for the survey do not 'represent' the country, the findings are applicable in many other parts of Pakistan.

1.7 Background to the Study

Poverty and inequality in Pakistan are reported to have increased in recent years. The increase in poverty is linked with a slowing of growth in the country. Various summary measures are used to show income inequalities. The Gini coefficient is the most popular statistical indicator of inequality (Government of Pakistan 2000). The Gini coefficient varies from zero (complete equality) to one (complete inequality), so that the more unequal the income distribution, the higher the Gini coefficient. It is an aggregate measure of inequality. Table 1.2 shows Gini coefficients of the household income distribution in Pakistan from 1986-87 to 1996-97. The data clearly show that inequality has been growing since the mid-1980s, the Gini coefficient increasing from 0.346 in 1986-87 to 0.400 ten years later. The major increase in poverty occurred between 1987-88 and 1990-91.

Table 1.2 Household income distribution in Pakistan

Year	Household Gini Co-efficient	GDP growth Rates
1970-71	0.330	1.2
1971-72	0.345	2.3
1979	0.373	5.5
1984-85	0.369	8.7
1985-86	0.355	6.4
1986-87	0.346	5.8
1987-88	0.348	6.4
1990-91	0.407	5.6
1992-93	0.410	2.3
1993-94	0.400	4.5
1996-97	0.400	1.9

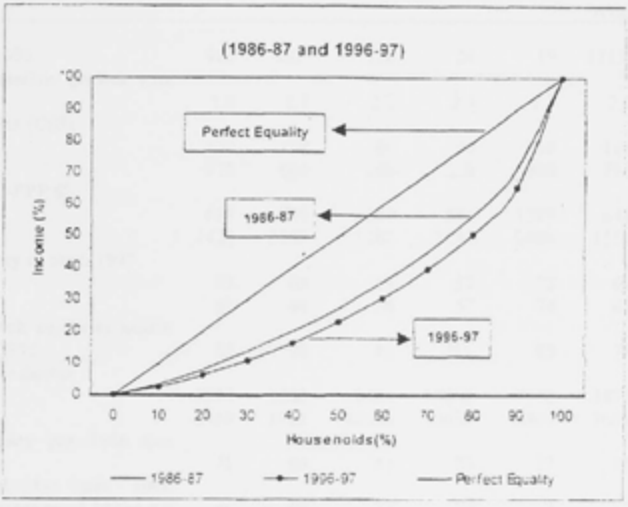
Source: Government of Pakistan 2000

According to the Pakistan Household and Expenditure Survey of 1990-91, 34 percent of households in Pakistan could be classified as poor (World Bank 1995). Growing inequality in the household income distribution is also evident from the Lorenz curve in Figure 1.1. It shows that inequality has increased since 1986-87.

Poverty and income inequalities affect health adversely (Alderman and Garica 1993, Hayes et al. 1994, Douglas 1998, Rosenberg and Wilson 2000). Increasing

poverty, in general, affects disadvantaged sections of society more adversely than advantaged ones. Infant mortality is reported to be 80 percent higher among poor households (Agha 2000). Women in Pakistan are generally accorded lower social status than their male counterparts, and growing poverty in the country is likely to have affected them more adversely than men. Socio-economic inequalities influence the overall well-being of the whole society. Anxieties and pressures are produced by growing socio-economic differences. Poor people start resenting the system and some begin indulging in activities that are harmful to society, like crime.

Figure 1.1 Lorenz Curve showing changing household income inequality between 1986-87 and 1996-97



Source: Government of Pakistan (2000)

According to the 1997 Human Development Report for South Asia, the disparity between economic growth and social development is greater in Pakistan than in most other countries (MHDC 1997). For example, real per capita income (in terms of purchasing price parity dollars) in Pakistan is about 75 percent greater than in India, but Pakistan lags behind India on most social indicators, including literacy and mortality (MHDC 1997). Table 1.3 shows a summary of key indicators for nations in the region and the developing countries overall. Similarly, with the exception of small countries like Sri Lanka and the Maldives, Pakistan's GNP and GDP per capita are the highest in the region, but it has the worst under-five mortality, 136 deaths per

thousand live births. Reported under-five mortality from the 1996-97 Pakistan Fertility and Family Planning Survey (PFFPS) (Hakim et al. 1998) is below the MHDC figure, but still higher than in other regional countries, as is mortality among children aged 1-4 years. In Pakistan, 41 children aged 1-4 years die per thousand live births, which is the highest rate in South Asia. Pakistan's proportion of illiterate adults is equalled by Bangladesh and surpassed only by Nepal. In short, Pakistan is a classic example of economic growth without commensurate social development.

Table 1.3 Comparative socio-economic profile of Pakistan in South Asia

	India	Pakistan	Bangladesh	Nepal	Sri Lanka	South Asia (Wtd Avg)	Developing Countries
Population							
(in millions) 1998	987	153[a]	128	24	19	1313[b]	4799
Annual population growth rate							
1995-00 (%)	1.8	2.7	2.2	2.5	1.2	2.0	1.8
GNP per capita (US$)							
1973	130	130	80	90	230	126	880
1996	370	500	360	220	800	393	1250
Real GDP PC-PPP $[c]							
1960	617	820	621	584	1389	648	790
1995	1422	2209	1382	1145	3408	1531	3068
Life expectancy at birth 1997							
Male	62	63	58	57	72	62	62
Female	62	64	58	57	74	62	64
Population with access to health services (%) 1995	85	55	45	NA	93	78	80
Population per doctor							
1980	2694	3500	8424	30062	7172	3875	NA
1993	2459	1923	12884	13634	6843	3684	5767
Infant mortality per 1000 live births 1997	71	95	81	75	17	75	65
Deaths aged 1-4 per 1000 surviving at exact age 1 1997 ($_4q_1$)	40	45	31	30	2	38	33.2
People with disabilities as % of total population 1992	0.2	4.9	0.8	3.0	0.4	0.83	2.6
Illiterate adults as % of total adult population 1995	48	62	62	72	10	51	29
Public expenditure on education as % of GNP 1995	3.5	2.7	2.3	2.9	3.1	3.5	3.6
Public expenditure on health as % of GDP 1997	0.7	0.8	1.2	1.2	1.4	0.8	2.0

Source: MHDC 1999

Notes:

Population figures for 1990, 1995, and 2000 are taken from UN: Age and Sex Distribution of population: The 1994 revision. (Medium variant). The population growth rate has been calculated by using the formula: {[(new value/old value)^1/n]-1}*100.

a According to the 1998 Census of Pakistan, the total population of the country is 131 million with an annual growth rate of 2.6percent.

b The South Asian figures include Bhutan and the Maldives.

c The real GDP per capita in Purchasing Price Parity dollars.

NA: Data not available

The comparative regional data on mortality (see Table 1.3) show relatively poor health in Pakistan. This is not a surprise, because the country spends so little on social sectors like education and health; for example, in 1995 only 2.7 percent of GNP was spent on health, compared with 3.5 percent in India. Besides low expenditure, maldistribution is a major problem. According to the MHDC, only 55 percent of Pakistan's population have access to health services, compared with 85 percent in India (Table 1.3). High urban-rural and regional health disparities indicate a skewed distribution of health resources. It has already been noted that 85 percent of qualified doctors are located in urban areas (Zaidi 1988), and even among cities and districts high disparities in the provision of health care services are also reported. For instance, according to 1998 data, there was one health care provider for 1493 people in Lahore District compared with one for 7143 in Bahawalnagar District (Government of Punjab 1998). According to the 1998 Census, the population of Rawalpindi District was 3.35 million with 53.2 percent urban population and Gujranwala District had a population of 3.37 million with a 50.6 percent urban component. These two districts are comparable in population and urbanization, but there were over three times as many health care providers in Rawalpindi as in Gujranwala (0.27 versus 0.08 per thousand population (Government of Punjab 1998). That there is a high concentration of government doctors in Rawalpindi is due to the presence of a medical college and teaching hospitals.

1.7.1 Social and Gender Inequalities: A Historical Overview

As a new nation, Pakistan had a rough start when in 1947 the Asian sub-continent was divided into India and Pakistan. A smaller Pakistan lacked resources and had a weak administrative infrastructure to deal with the huge problems of a new and poor state. The settlement of large numbers of refugees from India was a gigantic task. After a chequered socio-political life during the 1950s, Pakistan had a progressive decade during the 1960s. The growth of capital forms of production triggered rapid economic development, and produced large socio-economic disparities (Burki 1991:44). These disparities, coupled with political strife between the country's eastern and western wings, caused partitioning of Pakistan in 1971. The eastern wing became independent Bangladesh, and western Pakistan had to make yet another start as a smaller country. As a reaction to growing economic disparities, the new government initiated a large program to restructure the economy.

In 1972, 31 large-scale industries, private banks, and insurance companies were nationalized. Rice and cotton, the two major export earners, along with all private schools and colleges came under state control when the government established a number of state bodies to manage these enterprises (Burki 1991:45). As a result of this massive nationalization, many people lost their economic fortunes while many others gained. The huge expansion of the public sector provided many jobs and opportunities to ordinary people all over Pakistan.

The nationalization of private and prestigious educational institutions, both general and professional, opened them to the public and provided nearly free education. Many new professional colleges of medicine and engineering were also established. Such an open and free education policy permitted many poor segments of the population to acquire the skills needed for a variety of employment opportunities. As a result, some people moved up the socio-economic ladder and others slid down it.

Also during the early 1970s, another powerful social force began to affect Pakistan - overseas employment. Because of the booming oil-producing economies in the Middle East, large numbers of men were recruited to work overseas. According to Arif (1995:58, 124), 1.89 million Pakistanis were placed in the Middle East during 1976-92, these workers being exclusively men. In addition to workers in the Middle East, hundreds of thousands of Pakistanis worked in Europe, the USA, and other countries. According to 1983 estimates of the Ministry of Labour and Manpower (quoted in Klein and Nestvogel 1992), 1.6 million Pakistanis were living or working abroad. If one worker per household is assumed, 1.6 million workers represents the same number of households. In 1981, the population of Pakistan was 84.2 million and the average household size was 6.7 (Government of Pakistan 1981). Simple calculations reveal that 12.7 percent of households were directly affected by international labour migration. This effect is at one point in time, and over time the figure is expected to be higher.

An expanding public sector at home coupled with a large number of work opportunities abroad caused a domestic labour shortage. When men with required skills were not available, women gained employment opportunities (Klein and Nestvogel 1992, Aijaz, 1997). Possibly owing to this environment, "the male-female earnings differential was reported to have dropped sharply between 1979 and 1985-86" (Ashraf and Ashraf 1993:901). The impressive growth in female employment is evident from a MHDC report (1999:200) showing that the economic activity rate of

women aged 15 years and over increased from 11 percent in 1970 to 36 percent in 1995. Government policy on gender was liberal, and many women joined the paid labour force.

The female economic activity rates just quoted are based on the overall economic participation of both urban and rural women, paid and unpaid, in the formal and informal sectors. In the formal sector, when employers realized the benefits of docile, obedient female employees, they started to prefer women to men, creating an ongoing demand for female labour. The employment of women in the formal sector has improved over the last three decades, but this improvement has been limited and appears to have regressed in the recent past. In 1968-69, 6.6 percent of women in urban areas were employed in the formal sector. This figure increased to 11.8 percent in 1978-79, then declined to 8.7 percent in 1984-85 before rising again (World Bank 1989:87). It improved to 11.4 percent in 1994-95 (Government of Pakistan 1997), still marginally lower than the 1978-79 figure. According to the 1996-97 Labour Force Survey, 13.6 percent of females (aged 10 years and above) were employed in the formal sector (Government of Pakistan 2000:162).

The improving employment status of women in the 1970s was bound to improve their social status. Although it is hard to quantify this improvement, certainly women were more involved in public life and there was a significant positive effect on female emancipation (Klein and Nestvogel 1992). According to Nazli and Nazli (1995), the number of women in the Federal Government Civil Service almost doubled during 1983-89.

These changes in gender structures, however, brought destabilization to deep-rooted gender systems. Patriarchal forces like feudal and political interests did not approve of these changes, and attempted to restore the domination of patriarchy. On the other hand, some women experienced emancipation and pressed for more freedom and rights. These women, in general, were modern, educated women who attempted to challenge powerful patriarchal interests. This destabilization of gender structures introduced hurdles to the smooth functioning of social and gender systems.

While overseas labour migration by men contributed to employment opportunities for women at home, it had a negative side as well. As almost all of the migrant workers were men, large foreign remittances further enhanced the value of sons. When ordinary people witnessed the rapid upward socio-economic mobility among emigrants' households, they aspired to send one or more of their own men

overseas. Casual observation suggests that if they lacked sons to work overseas, they were disappointed. There was a further devaluation of the female gender, and an increasing parental desire for sons.

In addition to the effectt on gender, male employment in foreign countries also produced socio-economic discrepancies, a source of substantial social transformation. Social mobility among migrants' households was significant, many attempting to move up the socio-economic ladder with the help of their foreign earnings. This social mobility produced new forms of social disparities and contributed to the creation of a new class of new-rich.

Other social processes also had significant effects on socio-economic and gender inequalities. Corruption and urbanization were two very important social processes that produced social inequalities all over Pakistan. Corruption and bribery have always existed in Pakistan. The nationalization of industries and schools coupled with political strife boosted corruption at all levels of government, so that it became institutionalized. According to the MHDC (1998:95), corruption has floated upwards "from petty corruption in the 1950s, to mid level corruption in the 1960s and 1970s, to corruption at the very highest levels of the state in the 1980s and 1990s". As only a selected, but large, number of people in power attained wealth through corrupt practices, these practices contributed towards growing socio-economic inequalities.

Rapid urbanization became a substantial source of social discrepancies. The expanding public sector produced enormous employment opportunities, mostly in cities. Moreover, the capitalist mode of production encouraged mechanization of agriculture, which also fuelled rural-urban migration. The flow of foreign earnings boosted urbanization, as the availability of cash to rural households allowed them to migrate to cities. Free education centres attracted many young rural men to large cities as well.

1.7.2 Social Inequalities

Social inequalities are acknowledged to produce health inequalities among populations (Caldwell 1990a, Beck 1992, Bloom and McIntyre 1998, Kawachi 1999). In the context of high GDP growth in the 1960s, economic disparities widened (Burki 1991). The nationalization of private industries in the early 1970s was a reaction to these widening inequalities, aimed at redistributing resources and reducing disparities. Although economic restructuring in the 1970s was somewhat successful in

redistributing economic opportunities, it ended up also creating new economic disparities. Because of massive nationalization of industries, banks, insurance, and education, and overseas migration, people from the lower middle classes acquired new economic opportunities. As a result, in the 1970s and 1980s a fair-sized class of new-rich emerged. This new-rich class had social characteristics distinct from those of the established privileged classes. They displayed their wealth through durable goods like refrigerators, televisions, motor vehicles, and extravagant-looking houses. Emigrants' households were a major component of the new-rich, and played a key role in the display of wealth, as most returning migrants brought durable goods with them, and used their foreign remittances to buy new houses.

To contextualize the disparities of the 1960s and 1970s, the discrepancies of the 1960s grew in the context of political stability and high economic growth. These disparities emerged smoothly and people accepted them until certain political forces began to exploit them to gain power. The disparities of the 1960s were not visible to ordinary people, so there was not much resentment or anxiety about them. On the other hand, the growth of disparities during the 1970s was coupled with political instability and open displays of wealth. These inequalities were more widespread and more physically visible than those in the 1960s. While the differentials emerging in the 1960s were significant, the disparities of the 1970s were pervasive and had a profound effect on the social psyche of people in Pakistan.

The 1980s witnessed a social restructuring in reaction to economic and social discrepancies that had emerged through the 1970s. Pakistan achieved good economic growth through the 1980s, but its wealth distribution remained skewed. The 1999 MHDC report *Human Development in South Asia* reported that poverty had increased in Pakistan. According to this report, "30 percent of Pakistan's population were poor in 1995 – an increase of 50 percent within a period of five years" (MHDC 1999:13). The report observed that while Pakistan had had the highest economic growth in South Asia during the previous three decades, the fruits of economic development had not reached ordinary people. As a result, economic disparities between regions and between urban and rural areas had been exacerbated.

1.7.3 Gender Structures and Social Change

Economic growth and restructuring produced a sizeable class of new-rich. These newly rich people introduced a material culture to the traditionally simple

social systems of Pakistan. The custom of dowry has been common in Pakistan, and burgeoning materialism increased dowry demands and expectations. Wealth from corrupt practices or from foreign earnings fuelled growing dowry expectations.

In Pakistan, parents arrange nearly all marriages. Many parents used part of their earnings and wealth to find spouses for their sons and daughters from families of higher socio-economic status. Such marriages involved larger sums of money than had been normal, in terms of both gifts of dowry and extravagant feasts and ceremonies. Some parents used foreign earnings to attract daughters from higher socio-economic strata by a promising a comfortable living to brides. Although there are no data from Pakistan to directly verify the trend, there is little doubt that there was an increase in the average expenditure on dowry. According to Sathar and Kiyani (1998), higher demands for dowry have been experienced in Pakistan. Similarly, a study done in Bangladesh showed that expectations of dowry had increased in recent years (Amin and Cain 1995). It is highly likely that a similar trend occurred in Pakistan as well.

In the context of a marriage squeeze and a shortage of male spouses (Sathar and Kiyani 1998), inflated wedding costs and dowries had two important consequences. Firstly, it became harder for ordinary Pakistanis to find husbands for their daughters, because they could not afford to meet the dowry demands of the families of prospective grooms. Secondly, newly rich people could find spouses for their sons and daughters from non-kin families of higher socio-economic status. This trend possibly caused indignation among relatives whose children now could not be matched with desirable extended family marriage partners. Because consanguinity is common in Pakistan, the new marriage market realities created an important social issue for a large number of people.

During the 1970s, gender inequalities in education appear to have declined. The liberal policies of the government, provision of free education, and growing employment for women produced a new social milieu. The provision of free education benefited females more than males, because some parents were reluctant to spend money on females, whose roles were generally confined to household chores. According to Mahmood and Nayab (1998:719), "Changes in the socio-demographic perspectives in Pakistan are suggestive of the fact that women have not only contributed but have also disproportionately gained from the development process".

However, they maintain that the health status of mothers and children remains poor because of high prevalences of anaemia and malnutrition.

During the 1972 to 1981 intercensal period, male literacy in urban Punjab improved by 15.5 percent (47.8 to 55.2 percent) while the corresponding improvement among females was 31.1 percent (28.0 to 36.7 percent). Coupled with increased female employment, these educational opportunities brought women to greater prominence in public life. In certain ways, there was a sort of competition between men and women. As noted earlier, some employers started to prefer women to men. However, female disadvantage in gainful employment in Pakistan compared with other South Asian countries remains severe (Mahmood and Nayab 1998).

Public transport facilities in Pakistan had been inadequate, and the growing travel needs of women for schooling, employment, and other purposes put a lot of pressure on transport facilities where men and women had to compete for seating. This gender competition became severe and contributed to segregation of the sexes and demarcation of sections for males and females in public transport vehicles.

In the context of mainly male migration to overseas countries, many women took up the domestic decision-making previously managed by their now absent husbands. They had to look after the schooling of children, and because women were in control, they probably encouraged schooling of their daughters. The feudal and religious-political elite did not accept change in the gender-mix of public life, and destabilization of gender structures was taken as a threat to their traditional feudal interests.

1.7.4 Feudal Patriarchy and Change in Gender Structures

In the 1970s, liberal tendencies appeared to be occurring too fast, and to be beyond the absorption capacity of rigid structures. Normative and gender structures were stretched beyond their limits of flexibility. The change in gender structures coupled with the modernizing image of women did not fit well with the traditional ideology of orthodox feudal and religious-political elites. Patriarchal communities in Pakistan did not approve of women competing with men for employment, transport, and other public goods, although there was little competition for educational facilities because of segregated schooling. Knowing the patriarchal constitution of Pakistani society, the beneficiaries of patriarchal traditions (i.e. feudal landlords and the religious-political elite) converged into a powerful lobby to influence state policies to

revive weakening age-old patriarchal gender structures. The electronic media, especially television, were used to re-inculcate traditional values, behaviours, and attitudes. The popular TV serial '*Waris*' is a good example.

The feudal landlords, politicians, and industrialists had common interests in the maintenance of traditional structures. In the 1980s, they collaborated and joined forces with the government to work for the restoration of declining traditional control. The orthodox religious elite provided greatly needed legitimacy to their actions. The combination of these four forces, the state, feudal landlords, industrialists, and religious-political elites, produced the most powerful social coalition in the history of Pakistan. They systematically influenced social processes and the social psyche of the people, instigating a tradition-oriented 'social revolution'. To ensure revival of traditional control, they adopted a dual voluntaristic and coercive strategy. The voluntaristic measures included persistent acculturation through the media. Coercive actions included widespread violence against women and unjust implementation of *Hudood* laws.

In 1979, the *Hudood* laws, concerned primarily with gender and sexuality, were introduced. These laws were meant to protect and benefit women, but their unjust implementation resulted in restraining their rights in courts of law, and it became harder for women to seek justice against excesses perpetrated by men. A recent high profile government report concluded that these laws hampered women's social and legal status and constrained their rights to attain justice through normal court procedures (RCIW 1997). Recently, the Chief Justice of Pakistan has highlighted the need to review discriminatory laws against women in the country (*Nation* 1999).

Recent reports have suggested a growing trend of domestic and public violence against women (RCIW 1997; Fikree and Bhatti 1999; Human Rights Watch 1999). Violence against women ranges from mental torture to beating and murder. The incidence of stove burning is reported to have risen sharply in recent years (Human Rights Watch 1999). As there are no systematic data on violence against women, most studies are based on newspaper reports. According to the Human Rights Council of Pakistan, in an eight-month period during 1999, "of the 372 women who reported domestic violence, 272 died as a consequence of the battering" (quoted in Fikree and Bhatti 1999:196). Although these figures are alarming they represent only extreme cases coming to the attention of the Human Rights Council. Nevertheless,

they do highlight the severity and intensity of the battering of some women in Pakistan.

The custom of *karo kari* (honour killings) is continuing unabated. During 1999, of 264 honour killings, 162 victims were women (*Dawn* 2000). Honour killing of a woman is still not treated as 'murder'. The judiciary looks at 'honour killings' as having mitigating circumstances (RCIW 1997) and takes a lenient view of them, which only encourages more of them. Honour killings may be functional in local social systems, but such killings, mostly of women, produce a critical negative image of females.

In the past several years, newspapers have given extensive coverage to stories of violence against women. They increasingly have reported stove burnings (kitchen accidents), *karo kari* (honour killings), abductions, and gang rapes. Although such coverage has enhanced awareness of the problem, it has had a serious negative effect on the Pakistani social mind. Such stories have produced social apprehension about the security, safety, and future of females. Noting the significance of the negative contribution of the media, an Islamabad-based NGO called 'Sahil' requested media people to 'keep a low profile' while reporting such stories (*Nation* 2000). The suggestion was not to publish such stories prominently and sensationally, as many people were believed to have been influenced negatively by them. Pakistani media generally publicize stories about violence against women sensationally, and Sahil noted that such coverage might have encouraged some men to indulge in violence against women. Such sensational publicity also creates a negative and vulnerable image of females

Because the dominant social and gender structures are generally unfavourable to women, people seem to be more concerned about the futures of their daughters than of their sons. Their gender-based feelings are generally shared with relatives and friends, contributing to a cycle of growing discrimination against girls. First, they prefer that a girl should not be born in the first place. There may be implicit (praying) or explicit (sex-selective abortion in some cases) measures taken to avoid the birth of girls. Secondly, people may discriminate in providing health care to their children. According to the 1990-91 PDHS, for the 10-year period preceding the survey 22.0 boys and 36.5 girls per thousand live births died aged 1-4 years (NIPS 1992:118). The differential seems high, but consistent reporting of higher female than male mortality among children aged 1-4 years indicates the female mortality disadvantage (Arnold

1997, Hakim et al. 1998, Tinker 1998). This male-female child mortality differential is generally attributed to differential access to and use of health services. It is likely that the 66 percent higher mortality among girls than boys aged 1-4 years is largely the result of differential gender-based health care practices (NIPS 1992, United Nations 1996, Tinker 1998, Wallerstein 1998). This gender differential in mortality appears dramatic, and some more conservative estimates report as little as 12 percent higher mortality among girls than boys aged 1-4 years (MHDC 1999). There may be a variety of degrees of gender differential in reports of child mortality, but the common factor is that girls' mortality is higher than boys'.

1.7.5 Consequences of Gender Structures for Females

In Pakistan, gender structures are pervasive at household and social levels (Donnan and Selier 1997). Gender structures, just like social structures, influence the health of males and females (Broom 1999). In the context of a low social valuation of female gender, girls from lower socio-economic strata experience particularly severe discrimination in education and health. In 1995, literacy among adult Pakistani males was 50 percent, compared with 24 percent among adult females. The adult female literacy rate in 1995 was thus 48 percent of that of males, even lower than in India and Bangladesh (see Table 1.4).

In terms of female primary school enrolment as a percentage of male enrolment, the 1995 statistics ranked Pakistan at the bottom among South Asian countries, below even Nepal. The picture for other levels of school enrolment was similar. Data for 1992 showed that female mean years of schooling as a percentage of the male mean was also the worst (23 percent) in the region. Widespread discrimination against girls and women underlies high levels of illiteracy among females (UNICEF 1998).

The MHDC based in Islamabad has developed a 'Gender Development Index' (GDI) to compare women's situation across countries. The GDI is based on women's health and education status in relation to men's. Pakistan's record is not only poorer than those of most countries in the world, it is even worse than that of neighbouring relatively poor India, while Sri Lankan women enjoy the greatest emancipation in South Asia.

Table 1.4 Gender related profile of Pakistan in the context of South Asia

	India	Pakistan	Bangladesh	Nepal	Sri Lanka	South[b] Asia (Wtd Avg)	Developing Countries
Female population as a % of male 1998	94	97	93	85	102	93	97
Male literacy rate (%) 1995[a]	66	50	49	41	93	63	79
Female literacy rate (%) 1995[a]	38	24	26	14	87	36	62
Adult female literacy as a % of male							
1970	41	35	35	12	80	40	NA
1995	58	48	53	34	94	57	78
Female primary school enrolment as a % of male							
1970	64	37	48	20	92	60	79
1993	81	61	82	67	99	79	88
Female mean years of schooling as a % of male							
1980	32	25	29	33	79	32	33
1992	34	23	29	31	79	33	55
Female life expectancy at birth as a % of male							
1970	97	99	97	97	103	97	103
1997	100	103	100	100	106	100	105
Maternal mortality per 100,000 live births 1990-96	437	340	850	1500	140	480	384
Total fertility rate							
1960	6.0	7.0	6.7	6.0	5.4	6.1	6.0
1997	3.1	5.1	3.2	5.0	2.1	3.4	3.1
% decline 1960-97	48	27	52	17	61	44	48
Contraception use by women aged 15-49 years (%)							
1970	12	4	22	1	8	12	18
1990-95	41	18	49	29	66	39	56
Earned income share of females as % of male 1995	34	26	30	50	55	33	48
Female economic activity rate as a % of males 1995	46	36	73	68	55	48	64
Gender-related development index 1997	0.424	0.399	0.342	0.327	0.700	0.415	0.564
Gender empowerment measure 1992	0.228	0.179	0.305	NA	0.286	0.226	NA

Source: MHDC 1999
a Source: UNICEF 1998
b The South Asian figures include Bhutan and Maldives.
Note: The Gender-related Development Index (GDI) adjusts the Human Development Index (HDI) for gender equality in life expectancy, educational attainment, and income. For more information on HDI, see MHDC 1999.
NA Data not available

Another gender-related development measure constructed by the MHDC is called the 'Gender-Empowerment Measure'. This is based on statistics for variables such as schooling and income. Data for 1992 show that Pakistan was rated the poorest (0.179) among the countries for which data were available in South Asia, against a regional average of 0.226 (MHDC 1999:200). A more detailed comparison of the

gender-related profiles of Pakistan, other countries in South Asia, and developing countries in general is given in Table 1.4.

The data show that the maternal mortality rate in Pakistan was lower than in other countries except Sri Lanka. This may, however, reflect significant under-reporting of maternal deaths due to poor recording of causes of death. This argument receives some support from 1989 data, which estimated that there were 600-800 maternal deaths per 100,000 live births (NIPS cited in Mubarak 1990:29). According to the 1995-96 Pakistan Integrated Household Survey (PIHS) conducted by the Federal Bureau of Statistics (hereafter FBS) (1997:43), the MMR in Pakistan is around 650 deaths per 100,000 live births.

1.7.6 Effect of Gender Structures on Health Services Use

According to a 1996 United Nations report, *Too Young to Die: Genes or Gender*, the most important source of gender discrimination in health is differential access to health services. Educational, nutritional and feeding discrimination is reported from South Asia, but these discriminations have had limited differential effect on the health of males and females (United Nations 1996). Gender-based discrimination in immunization is also reported to be minimal. It is argued that differentials in the use of curative health services are both larger and more widespread. The differential parental use of health care is the main mechanism through which boys survive more frequently than girls do (Booth and Verma 1992, United Nations 1996).

As noted earlier, in Pakistan, 1981-90 data show that 36.5 girls and 22.0 boys per thousand live births died aged 1-4 years (NIPS 1992), 66 percent higher mortality among girls than boys. According to Hakim et al. (1998), during 1992-96 mortality rates were 18 boy and 23 girl deaths per thousand live births in this age group, suggesting a gender-based mortality differential of 27 percent. The variation in the extent of differentials in mortality is understandable, but all surveys show higher female than male mortality among children aged 1-4 years. Such differentials are usually attributed to gender-based discrimination in child rearing practices and parental use of health care services (NIPS 1992, AVSC 1997a, Tinker 1998, Wallerstein 1998).

Hospital data from the Islamabad Children's Hospital show that nearly one-quarter fewer girls than boys were brought for health care between January 1989 and

September 1990 (Mahmood and Mahmood 1995:701). If people from the relatively high literacy city of Islamabad discriminate against girls regarding health care, it is highly likely that people from other parts of Pakistan also use health services differentially for their sons and daughters. According to another recent report, statistics from large public hospitals in Pakistan reveal that a significantly larger proportion of boys than girls are brought for care at government health care facilities, even after adjusting for the excess of 104 males per 100 females among children aged 0-4 years (United Nations 1996:15). Given this pattern of health services use, a significant differential in survival between boys and girls aged 1-4 years should come as no surprise.

From birth, a female child is considered a guest in her parents' house, because she will move to her in-laws' home after her wedding (Hakim and Aziz 1998). Girls come to know about their transient status at home when very young. Some parents prefer to invest in education and training of their sons, because it will add to their home in a variety of economic and social ways. On the other hand, some parents invest in their daughters' education, training, and health to improve their marriage prospects.

To sum up, the major reason for poorer female than male health is the inequitable use of health services. Although educational, nutritional, and feeding discriminations are reported, their differential effect on the health of males and females is limited. Discrimination among boys and girls regarding immunization is reported, but the differential use of curative services is emphasized. Parents are more willing to utilize all possible resources for their sons, when ill, than for their daughters.

1.8 Objectives of the Study

The overriding objective of this research is to explore gender-differentials in health, and the underlying social processes that have a bearing on gender differentials in health. Although there is consistent evidence to show a causal relationship between socio-economic structures and levels of health (Leeder 1993), the mechanisms producing the association are not properly understood. This study aims to explore social and gender structures that produce differential health between males and females. The precise objectives are:

1. To assess gender and other differences in health-related variables, such as education, income, autonomy of women, and gender-composition of children, and to examine health differentials between the two study districts and between urban and rural areas within them.
2. To assess gender-differentiated concerns of respondents about various aspects of the lives of their children. These life-aspects include education, health, marriage, and security.
3. To assess the health status of respondents and their families as measured by self-perceived health status, prevalence of illness in the family during the month before interview, and deaths in the family during the two years before interview.
4. To examine possible associations between variables assessed under Objective 1 and the health status of respondents.
5. To examine possible associations between gender differentiated concerns of respondents about their children (Objective 2) and the health status of respondents and their families.
6. To examine the use of health care services by males and females and its possible effect on health.

1.9 Significance of the Study

The health of people, at both individual and community levels, is critical for the growth and development of societies. For sustainable development, the health of both males and females is vital. It is proverbial that men and women are two wheels of a cart that should both function well for smooth running of the cart. If one wheel is not working properly, it will put a strain on the other and the cart may ultimately break down. Therefore, both men and women should be healthy to promote a healthful society. However, extensive health inequalities between males and females are reported in societies around the world. In Pakistan, poorer female than male health is extensively cited in the literature. For example, child mortality is "higher among females (23 per 1000) than among males (18 per thousand)" (Hakim et al. 1998:179). "Women tend to rate their health 'fair or poor' more commonly than men", and anaemia is more common among women than among men (PMRC 1995:124).

Although large gender-based health disparities are reported, health inequalities generally are "poorly studied from a detached point of view" (Papanek 1990:165), and

the complexities of local social systems are not properly addressed. The relationships between health disparities and other variables like education and income are examined in isolation. Policy interventions based on such correlational studies are likely to have limited success. Gender inequalities in health must be examined in a broader perspective, which will result in the development of policy interventions that are more meaningful and effective. Using this approach, a researcher can "make arguments persuasive enough to convince the uncommitted" (Papanek 1990:165) and identify effective interventions.

Social systems around the world place different values or social worth on males and females. In most societies, females are devalued and males are cherished. In most South Asian cultures, females are considered an economic burden and males an asset. Daughters are generally considered a social liability while sons are believed to add economic worth to the family. Moreover, in recent years in Pakistan, security-related concerns about females have created new social biases against them. According to Hakim and Aziz (1998:736), owing to a lack of personal security, "women are advised by their families not to travel alone outside their locality or village". Violence against women, at home and in public, has increased. A limited number of studies in Pakistan suggest that from one-third to over one-half of women admit to being abused by their husbands (Sathar and Kazi 1997, Fikree and Bhatti 1999), and violence against women in public is also reported to have increased in recent years (RCIW 1997). Rape of young women is increasingly reported in the media, as is humiliating behaviour like stripping a woman and forcing her to run naked or sit on a car's bonnet through village streets (RCIW 1997:81). Such stories of violence are sensationally publicized, creating a vulnerable image for women. The media, are certainly creating awareness of the seriousness of the problem, but at the same time are encouraging some men to take advantage of women's socio-cultural vulnerability.

These growing concerns about females have resulted in their further devaluation, and as a corollary have enhanced the social worth of males. Sex-selective abortion has been reported in China and India, and Pakistanis may also be implicitly involved in the practice, through increasing availability of ultrasonographic facilities to ascertain the sex of unborn children. Midhet et al. (1998) acknowledged the cultural sensitivity of abortion in Pakistan and did not elicit information on abortion in the 1994 Maternal and Infant Mortality (MIMS) Survey. Abortion in Pakistan is illegal

and no data exist. However, during fieldwork for the present survey, a female interviewer learnt of a husband who gave pills to his wife in order to abort a female baby, without even telling her the purpose of the medication.

Against the background of this discriminatory gender environment, the literature has reported 12.0 to 66.0 percent higher mortality among girls than boys aged 1-4 years in Pakistan. This mortality differential for young children is significant. Although the life expectancy at birth of females has caught up with that of males, indicating an improvement in female mortality, this improvement has largely occurred at ages over five years.

Females are one-half of the population and a major socializing agent because of their mothering and nurturing roles. If they are healthy physically and psychologically, they can instil useful traits in children. This fostering role of women can certainly improve if they are healthy and have high self-esteem. Therefore, the dynamics of gender in national development are critical and should be appropriately addressed.

To improve women's psycho-physical health, gender disparities have to be addressed. However, reducing gender inequalities is a hard task, at least in the short run. A comprehensive understanding of gender structures is likely to uncover some of the policy interventions with potential to improve gender equity and help in redressing health inequalities. Such research may provide some clues to addressing social, legal, and economic systems that have a bearing on gender inequities in health.

Chapter 2

Female Status and Health in Pakistan: An Overview

2.1 Introduction

The health of both males and females in Pakistan has improved significantly over the last five decades, but the patterns of health progress followed by the two sexes have been different. The national health status in general and that of women in particular is poorer than in the rest of South Asia. According to the 1990-94 NHSP, the incidence of anaemia is high in Pakistan, especially among females. In urban Pakistan, nine percent of men and 37 percent of women aged 25-44 years are anaemic. In rural areas, the equivalent figures are 20 percent and 37 percent respectively (PMRC 1995). These gender differences in levels of anaemia make females more at risk of illness and poor health. Data on self-reported health status show that larger proportions of women than men report 'fair-to-poor' health (PMRC 1995). These health differentials between males and females produce different health conditions for the two sexes and accordingly influence mortality rates.

Table 2.1 shows infant and child mortality rates for different periods by survey source and gender. According to the 1990-91 Pakistan Demographic and Health Survey (PDHS), mortality among children aged 1-4 years improved by 28 percent from the mid-1970s to the second half of the 1980s (NIPS 1992). The 1996-97 Pakistan Fertility and Family Planning Survey (PFFPS) reported a 16 percent improvement in mortality among children aged 1-4 years between the first half of the 1980s and the first half of the 1990s (Hakim et al. 1998).

Mortality improvement among male and female children aged 1-4 has followed a different pattern. According to the 1996-97 PFFPS, male mortality improved by 14 percent from 1982-86 to 1992-96. The corresponding improvement among female children was 23 percent. Comparison of the progress in mortality of young children suggests that female mortality improved more rapidly than that of males, but female mortality disadvantage remains. The data show that during 1992-96, 28 percent more female than male children aged 1-4 years died (Table 2.1) (Hakim et al. 1998). The 1990-91 PDHS showed 66 percent greater mortality among girls than boys aged 1-4 years during 1981-90 (NIPS 1992).

According to the MHDC (1999), in 1997, mortality among children aged 1-4 years was 45 deaths per thousand live births, which is more than double that reported by the 1996-97 PFFPS. Although uncertainties surround statistical data on health in Pakistan, most researchers agree that female health is poorer than that of males (NIPS 1992, Hakim et al. 1998, Tinker 1998, MHDC 1999). Female life expectancy at birth is now on a par with that of men at 63 years (UNICEF 1998), but more female than male children aged 1-4 years die. More females than males rate their health 'fair-to-poor' and larger proportions of females than males are anaemic (PMRC 1995, Mahmood and Nayab 1998).

Table 2.1 Infant and child mortality rates for different periods by survey source and gender

	PDHS			PFFPS			PIHS			MHDC		
	$_1q_0$	$_4q_1$	$_5q_0$	$_1q_0$	$_4q_1$	$_5q_0$	$_1q_0$	$_4q_1$	$_5q_0$	$_1q_0$	$_4q_1$	$_5q_0$
						Male						
1981-90	102.1	22.0	121.9									
1982-86				125	21	143						
1987-91				108	18	124						
1992-96				92	18	108						
1996-97							101					
						Female						
1981-90	85.5	36.5	118.9									
1982-86				102	30	128						
1987-91				111	27	135						
1992-96				92	23	114						
1996-97							108					
						Total						
1973-78	107.1	40.7	143.5									
1979-84	96.7	29.8	123.6									
1985-90	90.5	29.5	117.4									
1982-86				113	25	136						
1987-91				109	22	129						
1992-96				92	21	111						
1996-97							105					
1997										95	45	136

Source: NIPS 1992, FBS 1997, Hakim et al. 1998, MHDC 1999.

The different chemistries and genetic compositions of the two sexes may explain part of the story, as the reproductive biology of women has an association with illness patterns. More importantly, however, gender-based factors located in pertinent social systems are increasingly deemed to explain health differentials between males and females. Gender systems are pervasive, and so permeate everyday life as to ordinarily go unnoticed. Female status in Pakistan is low (Patel 1991, Weiss 1999) and this "low social, economic and legal status of women is intimately tied to the well-being of their children" (Agha 2000:199). To understand the role of gender in-health, one has to look in depth at local social processes through which the health of the two sexes is differentially influenced.

The low status of females is one of several factors in Pakistan that interferes with development (Hakim and Aziz 1998). Because the social status of people has a strong bearing on the distribution of power and resources, it influences the health of males and females differently. For example, in gender-stratified societies, men have more access to socio-economic resources than women do, and this differential access affects health. This chapter will review gender-related social conditions and their differential effect on the health of males and females in Pakistan.

2.2 Female Social Status

The measurement of social status is complex (Mason 1986, Hakim and Aziz 1998). People generally use aggregate quantitative markers such as levels of education and income to measure the relative status of populations. Some scholars use qualitative variables to assess the relative social ranking of people. In Pakistan, the status of a woman is reported to improve once she becomes a mother (especially of a male child) (Shah 1987, Ngor 1999, Bhatti and Fikree 1999). Although this is true, it must be viewed in the context of the highly gender-stratified social structure of Pakistan, whereby "conceptions of true, good, important, valuable, beautiful (and their opposites) will necessarily reflect primarily the experiences and perceptions of its dominant male members, past and present" (Reskin 1988 quoted in Chafetz 1990:56). Therefore, qualitative improvement in women's status through bearing male children reflects a patriarchal disposition. In patriarchal societies, the primary roles of women are as wives/mothers and as bearers of children (especially boys) to help strengthen patriarchy. Therefore, perceived enhancement of female social status through mothering actually helps perpetuate the low status of women. Because of to the

negative health consequences of high fertility (Caldwell 1986, 1995, Bennett 1995, 1999), such a qualitative improvement in women's status actually contributes to the relatively poor health of women.

Qualitative aspects of female status are also criticized for their subjectivity. Researchers' own socio-cultural and religious biases may influence any assessment of such aspects of female status. Therefore, qualitative aspects of women's social position may be important in individual situations, but they are too weak to be assessed as part of the status of women as a group. In gender–stratified societies, the use of qualitative variables is likely to present a mitigated picture of women's low status.

In patriarchal Pakistan, any assessment of qualitative improvement in women's status, especially by Pakistanis, will have patriarchal biases about which the assessor may not even be aware. Shah (1987:152) noted the acquisition of higher status by women once they become mothers, especially of sons, but acknowledged in the same paper that generally "societal perceptions (in Pakistan) accord a lower value to females than males". The lower status of women is clearly evident from an official report on the status of women which claimed that women in Pakistan were "treated as possessions" (Government of Pakistan 1983:3).

The link between qualitative and quantitative measures of social status is expected to be strong. If women's status improves qualitatively, then quantitative variables should also show improvement. Although females in Pakistan have made some gains over the last few decades, quantitative variables like education, income and childhood mortality still indicate a debilitated situation for women. High rates of illiteracy and low employment and income signify a poor status for women. Although families provide some education to girls, in many cases their objective in doing so is to make them good wives and mothers.

The public arena in Pakistan is reserved for men, and male members of families, under the normative patriarchal structure, shape the lives of women. The institution of *purdah* (seclusion) is pervasive, restricting women's access to information, education, employment, leisure, and political participation (Klein and Nestvogel 1992). Cultural norms belittle women and accord low status to them and their work. Wage employment among women is scarce and their access to technology and credit is limited. Women's everyday lives are full of hardships, including exhaustingly long workdays. On top of that, adverse living conditions like smoke-

filled kitchens, unhygienic home surroundings, repressive family environments, and violence reinforce their low social status and adversely influence their psycho-physical health.

Pakistani females gained some height on the social ladder during the 1960s and the 1970s, but experienced pressures during and following the 1980s. Pakistan is predominantly a Muslim country and its women are greatly affected by Islam. According to Ahmed "the position of women in a Muslim society mirrors the destiny of Islam: when Islam is secure and confident so are its women; when Islam is threatened and under pressure so, too, are they" (Ahmed 1988:184). Islam is a strong instrument of social regulation and control in all Muslim societies. In Pakistan it experienced significant instability in the 1970s and 1980s, and this had a substantial influence on women's lives. The liberal political process which started towards the end of the 1960s resulted in the incorporation of women's rights into the Constitution of 1973. These rights were modelled on the modern United Nations Stated Principles (Klein and Nestvogel 1992). This 1973 Constitution of Pakistan gave more rights to women than they had had earlier (Hakim and Aziz 1998). Five major clauses of the Constitution relating to women's equitable rights were reproduced by Hakim and Aziz (1998). One of them says: "Steps shall be taken to ensure full participation of women in all spheres of life." As a result, the 1970s witnessed increasing female participation in social, political, and economic life, and women became more visible in public.

However, the period between 1978 and 1981 was critical. The *Hudood* laws came into force on 9 February, 1979. These laws were meant to benefit women, but their unjust implementation ended up creating severe socio-legal disadvantage for women (RCIW 1997). The status of females was undermined, and crime against women increased. Women faced increasing hardships in obtaining justice in the new gender environment (RCIW 1997). According to Hakim and Aziz (1998:734), "some institutional developments during Zia's period (1977-1987) are significant in recognising the adverse position of women".

While the 1980s and 1990s brought social disadvantage for women after the 1960s and 1970s had established positive trends, overall there has been progress in their emancipation since the 1950s. The setbacks after 1980 were significant enough to have a regressive effect on women's improving status, but the momentum of the 1970s spawned women's social movements, which kept pressure on patriarchal structures. As a result, there was a substantial improvement in women's economic

participation from 11 percent in the 1960s to 36 percent in the 1990s (MHDC 1999). Although this improvement is impressive, female employment in the formal sector has stagnated since the late 1970s. In 1978-79, 11.8 percent (World Bank 1989:87) and in 1994-95, 11.4 percent of women were employed (Government of Pakistan 1997:112).

Concerning education, the gender gap has either stayed the same or widened. Female as percentage of male mean years of schooling declined from 25 percent in 1980 to 23 percent in 1992 (MHDC 1999). Although this is a very small relative decline which may be a result of different estimation procedures, it nevertheless represents a negative trend for a very important indicator of social status, especially when compared to India where female relative to male schooling slightly improved during the same time period (MHDC 1999).

2.2.1 Current Status of Females

Family is a significant social institution in male-dominated Pakistani society. The family is highly conscious that a daughter does not belong to the family where she is born, but rather to the family of her future husband. She is considered a guest in her family (Ahmed 1986). Being a guest in her family, she may be treated fondly in some families, but most parents in Pakistan are reluctant to invest in daughters because of their minimal participation in gainful employment. After marriage, a daughter's status in her new family is uncertain until she bears children (especially males), because her interaction with the new family is mainly through her children (ESCAP 1987:52). "A childless wife may suffer the disgrace of having her husband take a second wife in a few years, and a wife who bears only daughters faces the same possibility" (Hakim and Aziz 1998:729). Local culture and Islamic injunctions have mutually reinforced gender structures that assign low social status to females. In such a social context, the major roles of women in Pakistan are as a wife and a mother.

Currently, on average, Pakistani women bear five children and, in 1998, only about one-third of females aged 10 years and over were literate compared to 56.5 percent of males. Because of the high fertility rate and scarcity of health services, the maternal mortality rate is high. According to conservative estimates, nearly 340 mothers die for every 100,000 live births, compared with only ten such deaths in developed countries and 140 in Sri Lanka. In comparison to other large South Asian countries, Pakistan's estimated maternal mortality rate is lower, but the actual rate may be higher because of the weak health records system (Tinker 1998). Some

scholars believe that the maternal mortality rate in Pakistan lies between 300 and 700 per 100,000 live births (FBS 1997, Midhet et al. 1998).

Gender stratification is a common feature in most Third World countries, including Pakistan (Khoury and Moghadam 1995). In Pakistan, the constraints on females are of two types, legal and customary. The legal constraints emerge from Islamic injunctions and the country's legal and judicial systems. Women's rights are reported to have suffered a setback due to legal changes introduced during the late 1970s and the early 1980s (RCIW 1997, Hakim and Aziz 1998, Mahmood and Nayab 1998). Legal inequities include laws about inheritance, marriage and divorce, child custody, and being a witness in a court of law. The laws introduced in the 1970s and 1980s were meant to benefit women, but their unjust implementation produced an inequitable burden of proof for women and made it harder for them to obtain justice from the local judicial system (RCIW 1997). The customary constraints on women relate to their domestic role and seclusion. These restrictions from public life limit women's access to education and paid employment. However, many women in Pakistan work at home to help in the businesses of their husbands (Weiss 1996). They are not directly paid for such work and hence it goes unnoticed. They remain overly dependent upon men for access to various resources, including health care services and self-development. The low level of female education in Pakistan is a "sign of strong male dominance and patriarchy but it may also be a factor reinforcing that situation" (Caldwell 1995:392).

2.3 History of Health Improvement in Pakistan

Health in Pakistan has steadily improved since the country's creation in 1947. Morbidity and mortality rates have fallen steadily (Government of Pakistan 1997). The crude death rate has dropped from 30 deaths per thousand population in the 1950s to only eight per thousand in the 1990s (Table 2.2). Life expectancy at birth has improved substantially to 63 years in the 1990s (UNICEF 1998) from only 34 years some four decades previously. The crude death rate and infant mortality stopped improving significantly after the 1960s. According to 1989 data, infant and childhood deaths constitute nearly three-fourths of total deaths in Pakistan, leading to the highest under five mortality in South Asia (Bennett 1999). Infant mortality is an important indicator of population health. It has improved from 178 in the 1950s to 92 deaths per thousand live births in the 1990s (Table 2.2).

Table 2.2 Profile of health improvement in Pakistan

	1950s	1970s	1980s	1990s	Progress(%) 1950-90s
Crude death rate	30	14	11	8	73
Life expectancy at birth (both sexes)	34	53	55	63	85
Infant mortality rate (deaths per thousand live births)	178	105	100	92	48

Sources: Mubarak 1990, Hakim et al. 1998, UNICEF 1998.

During the 1980s and the 1990s, however, the progress of infant mortality decline appears to have slowed, especially among females. During 1982-86, the male IMR was 125, and 10 years later it had declined to 92, an improvement of 26.4 percent. Among females, the corresponding improvement was less than ten percent (Table 2.3). The continuing high IMR is partly due to the prevailing high fertility burden among women in Pakistan.

The data show that neonatal mortality among male children declined by about one-third between 1982-86 and 1992-96, but that there was net change in female neonatal mortality during this period (Table 2.3). During the same decade, post-neonatal mortality improved by 21 percent among males and 19 percent among females.

These data suggest that the male IMR has improved more rapidly than that of females. Generally, female biological advantage leads to fewer infant deaths among girls in a population. The equal IMRs (92 deaths per thousand live births) recorded for boys and girls during 1992-96 suggests that the genetic advantage of females is nowadays being offset by their socio-cultural disadvantage. Even with substantial improvement in the IMR over the last 50 years, the health of children remains dismal. The under five mortality rates of 108 among boys and 114 for girls in 1992-96 are disturbing, and are higher than in any other large Asian country in the region. Mortality among children aged 1-4 years shows a significant gender differential, with 18 male and 23 female deaths per thousand live births (Table 2.3).

Among children aged 1-4 years, the improvement in female mortality between 1982-86 and 1992-96 was 23 percent, and among males it was 14 percent (Table 2.3). These data suggest that female health at these ages has improved at a greater pace than

male health. However, female disadvantage continues. It is estimated that there were 27 percent more deaths among female than male children in this age group during 1992-96 (Table 2.3).

Table 2.3. Improvement in child mortality (deaths per 1000 live births) between the 1980s and the 1990s

	1982-86	1987-91	1992-96	Progress (%) 1980s – 90s
Neonatal				
Male	77	63	53	31
Female	56	69	56	0
Post-neonatal				
Male	52	48	41	21
Female	48	45	39	19
Infant mortality				
Male	125	108	92	26
Female	102	111	92	10
Aged 1-4 years				
Male	21	18	18	14
Female	30	27	23	23
Aged under five years				
Male	143	124	108	24
Female	128	135	114	11
Number of births (Unweighted)				
Male	3514	4519	4251	NA
Female	3310	4295	4087	NA

Source: Hakim et al. 1998:176
NA Data not available

Life expectancy has improved among both men and women since the 1970s, with a slightly greater improvement for females than males (Table 2.4). However, maternal mortality remains high. The maternal mortality rate was reported by Mubarak (1990:25) to be 390 maternal deaths per 100,000 live births in the 1970s. During the 1980s, Mubarak (1990:29) reported the MMR to be 700, and during the 1990s, UNICEF (1998:120) reported a figure of 340 (Table 2.4). The trend indicated by these figures is highly improbable, and reflects the considerable difficulty of estimating maternal mortality.

According to Agha (2000:1587), the maternal mortality rate is currently being reported as between 300 and 700 deaths per 100,000 live births According to the 1995-96 Pakistan Integrated Household Survey (PIHS), the maternal mortality rate was 650 maternal deaths per 100,000 live births (FBS 1997:43). The study, cautioned, however, that the figure was subject to high sampling error. "Had the survey reported

even one death higher or lower than 17, this would have resulted in a change of ±40 deaths in our estimate of maternal mortality" (FBS 1997:43). This indicates that maternal mortality data in Pakistan are not reliable, but the MMR is expected to be high owing to high fertility, and hence close spacing of births, and to the fact that most births take place in circumstances where emergency medical facilities are not readily available if needed. The TFR declined by only 15 percent between the 1970s and the 1990s (Table 2.4).

Table 2.4 Profile of health improvement since the 1970s in Pakistan

	1970s	1980s	1990s	Progress (%) 1970s - 90s
Life expectancy at birth				
Male	53	55	62	17
Female	52	54	64	23
Maternal mortality rate (deaths per 100,000 live births)	390	700	340	13
Total fertility rate	6.6	6.5	5.6	15

Sources: Mubarak 1990, Population Council 1998, UNICEF 1998.

Unfortunately, there are no time series data on mortality for adult males and females. The gender-differentiated pattern of health improvement among adults may be different from that presented for children aged under five, but data on anaemia, blood pressure, and diabetes show higher prevalences among adult females than males. For example, among 45-64 year-olds in urban Pakistan in 1990-94, about 19 percent of women and less than 15 percent of men had diabetes. The corresponding figures for rural Pakistan were nine and seven percent respectively (PMRC 1995:55).

Higher than normal blood pressure has links with socio-economic status and is more prevalent among higher socio-economic classes. Among the low classes in urban Pakistan, a slightly larger proportion of men than of women interviewed for the 1990-94 NHSP had severe hypertension (PMRC 1995). However, among the middle and higher socio-economic strata, larger proportions of women than of men had severe hypertension. Among those of high socio-economic status, four percent of women and no men had severe hypertension.

Similarly, more than double the proportion of rural women aged 25-44 years (44 percent) compared to men of the same age (21 percent) were anaemic. The

corresponding figures for urban areas were 38 percent and 12 percent respectively. Regarding self-assessed health status, more females than males in all age groups from both rural and urban areas reported their health 'fair-to-poor'. For example, among those of low socio-economic status in urban areas, nearly 85 percent of women and 46 percent of men reported 'fair-to-poor' health. Similar proportions of low-status women and men in rural areas rated their health 'fair-to-poor'. However, lower proportions of people from middle socio-economic strata rated their health 'fair-to-poor'. In urban Pakistan, among those of middle socio-economic class, 55 percent of women and about 34 percent of men rated their health 'fair-to-poor'. Corresponding figures for rural Pakistan were higher at 89 percent and 46 percent (PMRC 1995:127). While acknowledging links between gender inequalities and health, Mahmood and Nayab (1998) have endorsed gender equity and empowerment of women as workable strategies to improve women's access to health care facilities.

2.3.1 Violence against Women

Although violence against women was a non-issue a few years ago, it is fast gaining recognition as a social and public health issue (Bograd 1988, Tinker 1998, Wilkinson et al. 1998). Unfortunately, this menace is reported to have increased in the last two decades, although there is a severe paucity of literature on it. Recently, though, a study of nearly 150 women from Karachi appeared (Fikree and Bhatti 1999). It showed the severity of the problem and its impact on women's reproductive health. According to the study, "the significant predictor of anxiety/depression was severity of physical abuse in the presence of socio-economic indicators of income and education level of self" (Fikree and Bhatti 1999:199).

Violence against women is a sensitive social problem, and research on it is inherently difficult. A 1997 survey of over 1000 women in rural Punjab found that over one-third had experienced physical abuse by their husbands at some point in their relationships (Sathar and Kazi 1997). The incidence of violence against women is expected to be lower in urban areas than in villages, but the differential may not be significant. In Punjab, the highest proportion of women reporting physical abuse by their husbands (over one-half) were those from peri-urban areas. The Karachi and rural Punjab studies showed similar proportions (one in three) of both rural and urban women reporting physical abuse (Sathar and Kazi 1997, Fikree and Bhatti 1999). However, it should be noted that the rural Punjab study was a household survey while

the Karachi study recruited female respondents through clinics they attended with violence-related and other medical complaints. There are not many studies in this area, but recent research indicates that violence against women has increased in recent years (RCIW 1997, HRW 1999), suggesting a declining social and health status of women in Pakistan.

In short, violence against women is a serious social and health issue in Pakistan. It is reported to have increased in recent years, both at home and in public. The widespread physical abuse of women carries severe implications for their social status and their psycho-physical health.

2.4 Gender Processes

The social status of women in Pakistan is low (Ikramullah 1963, Iqbal 1980, Mumtaz and Shaheed 1987, UNICEF 1988, Mason 1989, Hakim and Aziz 1998). Normally Pakistani females are socialized to internalize male domination, and thus they willingly accept the low status prescribed by the patriarchal social system. Their social minds develop along with continuing dependence on males, as being escorted by male family members starts at an early age. Submissive girls are socially appreciated and preferred as marriage partners. Accordingly, the dominant patriarchal social structures mould female expectations to fit their future roles as subservient wives and mothers.

Vocal and demanding women are socially looked down upon, and passivity among females is encouraged by local social systems. Patriarchy rewards female passivity by providing socio-economic protection, and punishes those who challenge entrenched gender structures. Murder of women in the name of family (patriarchal) honour is partly due to those scoio-cultural structures. For example, a woman was recently reported to have been murdered for seeking a divorce from her husband (Husain 1999). For the vast majority of women, submission and dependence are an unjust price to have to pay. Female dependence on males for resources like health care and education has many negative consequences, including that on their health. Many females in Pakistan are deprived of needed health care services by male control over resources. The resulting lack of access to appropriate health services is likely to have a negative effect on women's health (Zahid 1996, Midhet et al. 1998).

Many women from higher socio-economic strata enjoy some privileges, like housemaids, drivers, and servants which are provided by the patriarchal system. The

provision of ample cash also allows these women leisure and pleasure. However, the vast majority of poor women suffer from crude forms of male domination. Women from the disadvantaged socio-economic classes face a triple burden: reproduction, domestic and farm or wage labour, and domination from husbands and the patriarchal structures of the larger society. The majority of Pakistani women live in rural areas which lag well behind socially and economically, and this contributes to the perpetuation of gender inequities (Mahmood and Nayab 1998).

2.4.1 Health Services Use

Differential use of health care services is known as an important contributor to health inequalities among populations (Mahmood and Mahmood 1995, Ahmed et al. 2000, Branch and Rebiner 2000). South-central Asia, including Pakistan, is the focus of research regarding gender differentials in food and health care allocation (United Nations 1996:203). Recent research has emphasized the impact of health care differentials on health and survival (Das Gupta, 1987, Basu 1989). It is claimed that differentials in the use of health care services are both larger and more pervasive than those in food allocation. It is also argued that differential use of curative health services is the main mechanism leading to greater survival of boys than girls. Owing to the skewed provision and use of health care services in favour of males in Pakistan, it is usually recommended that access to health care services among females in particular should be promoted (Zahid 1996, Mahmood and Nayab 1998).

The major reason for high maternal mortality in Pakistan is the lack of maternal health care services, especially in rural areas (Midhet et al. 1998). The lack of female health care providers and the distance to health care facilities are identified as significant contributors to high maternal mortality (Bhatia 1993, Pervez et al. 1993).

District Headquarters Hospitals in Pakistan were built by the British to provide health services to civil servants (Mubarak 1990). With rapid growth of population in Pakistan, these hospitals were opened up for the use of the general public. Presently, in the public sector, there are 94 district and some additional teaching hospitals in the country. When they could not cope with the increasing needs of a fast-growing population, the private sector entered the health care delivery system. However, private health outlets were costly and provided services only to those who could afford them.

Pakistan-wide, there are about 4000 public sector health facilities for over 44,000 localities (Mubarak 1990). This means that, on average, only nine percent of localities have government-operated health services units. In 1986, only 4-5 percent of the sick utilized public sector health care in the province of Punjab (Mubarak 1990:4). Recently, according to a nationwide survey (PMRC 1995), only 21 percent of those who consulted a health care provider visited government doctors, while the rest used private doctors. These figures are not comparable because the first is provincial and the second national, but both statistics show that only a small proportion of Pakistanis use government-run health care services.

The use of traditional health care providers (hakims, homoeopaths, faith healers) by respondents to the 1990-94 NHSP was infrequent, 17 percent of visits of people of low socio-economic status, and six percent of visits of people of high socio-economic status being to such traditional health care providers (PMRC 1995). Because of the concentration of private health services in large urban centres, urban-rural and regional disparities in health and health services use have widened.

As with regional and urban-rural health service differentials, there are two facets of gender differentials in curative health care provision: first, in the provision of *any* curative health care, and secondly, in the differential quality of health care provided to males and females. In a study in the slums of Lahore, 27 percent of sick girls compared with only 12 percent of sick boys were not taken for any medical treatment (Sabir and Ebrahim 1984). However, the quality of health care services is a more important source of gender differentials in health. Modern private practitioners of medicine are expensive, and considered better than other health care providers. According to Sabir and Ebrahim (1984), 58 percent of sick boys and only 37 percent of sick girls were taken to private practitioners. This is understandable, because 77.1 percent of health expenses in Pakistan in 1997 were out-of-pocket expenses (WHO 2000b). Parents are less willing to spend on low-status daughters than on sons.

Immunization practices in Pakistan are reported to influence neonatal, infant and child mortalities (Zahid 1996). While female disadvantage in curative care is frequently reported, female disadvantage in preventive care also exists. Lower proportions of Pakistani females than males are reported to have been immunized (United Nations 1996). Studies on immunization either use health cards or self-reports of immunization. Both techniques have their problems and complexities, but both show that more boys than girls are immunized in Pakistan. These gender differentials

in immunization are not large, but consistently more boys than girls aged 12-35 months are reported to have been immunized with BCG, polio, DPT, and measles, vaccines. Some 28.0 percent of boys and 31.4 percent of girls did not receive immunization shots during the period for which data were collected by the 1996-97 PFFPS (Hakim et al. 1998:190).

Differential use of traditional health care providers (hakims, homoeopaths, faith healers) and home remedies manifests gender-based treatment preferences. According to the 1990-94 NHSP, larger proportions of females than males aged 5 years and older in all socio-economic strata from both rural and urban areas used traditional healers (PMRC 1995). For example, among 15-64 year-olds in rural Pakistan, over 40 percent of women and 28 percent of men used traditional health care providers. The corresponding figures for urban areas were 28 and 21 percent respectively. Similarly, higher proportions of girls than boys aged 5-14 years were taken to traditional healers (PMRC 1995:9).

To summarize, gender differentials in health care services use in Pakistan suggest that females, in general, receive less and poorer-quality health care (PMRC 1995, Sabir and Ebrahim 1984). The nutritional status of Pakistani females is generally poorer than that of their male counterparts, and females are more prone to get ill. This being the case, females need good-quality care. Inadequate provision of health care services to females is only likely to worsen their health. In short, females are at a disadvantage in health care services use in Pakistan due to culture and parental discrimination against female children.

2.5 Gender Differentials in Health - Towards a Theoretical Model

Although advances in medicine and modern clinical practices have been important to the health and well-being of both sexes, an ever-growing body of literature underlines the significance of socio-economic and cultural factors as underlying the statuses of populations' health. Socio-economic, cultural, and biological factors are noted as important determinants of population health, but their inter-relationships are complex (McCarthy and McCain 1992). Health status in developed countries is much better than that in poor countries, but some developing nations, like China, Sri Lanka, and Costa Rica, record health indicators, and life expectancies at birth, nearly as good as those in developed countries. Caldwell (1986) has identified nearly a dozen countries around the world achieving health statuses far beyond what

their national levels of per capita income would predict. In other words, it is not just economic improvement that produces health. A conducive social environment may be equally important to good health outcomes in a population. While the correlation between socio-economic status and health is strong, the mechanisms through which the social environment effects on health are not properly understood.

Along with age, gender is the most salient human attribute in almost all societies. The first piece of information to know concerning all human interactions is the sex of the individual concerned, because most following interactions are shaped on gender information. Although this gender basis of human interaction is now undergoing change, most inter-human dealings still reflect the gender of the actors and gender structures. To make interaction relatively easy, different dress codes are applied to men and women. The sex of an individual is clearly an important reproductive distinction, but that distinction has been overly highlighted in contemporary societies. Undoubtedly, a clear distinction between males and females is functional for society, but stereotyping of males and females has gone too far, and a whole body of beliefs has accumulated around persons' sex. These beliefs and attitudes have a strong bearing on the comparative health of males and females.

Sex and gender are often confused, and are generally used to mean the same. Sex normally means biological differences between males and females. Gender, on the other hand, conveys "socio-culturally constructed components attached to each sex. Moreover, biological differences - whatever they may be - are basically constant across historical time and space" (Chafetz 1990:28), but gender systems change over time and differ across societies. As a consequence, the health of males and females varies.

Gender is increasingly being recognized as a major source of social and health disadvantage for females in almost all societies around the world. Females are systematically disadvantaged through socially produced differences between the sexes. Gender seems to permeate all aspects of individual and social life, shaping social processes at micro and macro levels of human activity. Gender is so pervasive in people's lives that its effects often go unnoticed. Our psyche, stereotypes, and predispositions do not allow us to appreciate the dynamics of gender in shaping our attitudes, motives, and behaviours. And we just take these behaviour patterns as 'given' and do not see how they relate to differential health outcomes in populations.

The role of wife/mother is a hard one, and to prepare girls for it they are socialized to attach high social value to altruism from childhood. Similarly, giving

birth is a painful process and the image of painful mothering is applied to the whole of their lives. Although this socialization pattern may help prepare females for a tough wife/mothering role, it certainly contributes towards making their lives relatively uncomfortable as well.

The analysis of health differentials between males and females is as complex as are gender systems themselves. Females are considered a sicker sex because of gender-based beliefs about the reproductive biology of women, and accordingly some complaints of illness among females are considered 'normal' and attributed to their biology. Consequently, the threshold for labelling women as 'ill' is higher than that among men. Females in Pakistan are more likely to delay seeking medical help until an illness reaches an advanced stage. At times, these delays lead to medical complications and death. Medical complications emerge through lack of access to and use of available health care services, and the major reason for high maternal mortality is complications of obstetric problems (Midhet et al. 1998).

2.5.1 Gender-based Concerns

How do gender systems come to influence health and health care behaviours? Gender stratification structures are so rigid, discriminatory, and important that people start thinking about the sex of a child even before conception. People pray for the birth of sons. The births of sons are celebrated and rejoiced, while female births are accepted quietly, or mourned if there are two or more living daughters already.

The source of differential attitudes towards sons and daughters can be traced to gender-based concerns. Boys and girls raise their own types of concerns for their parents. These concerns relate to aspects of the children's future lives. Education, employment, security, and marriage are some of the major issues with which parents are usually concerned. Educational and employment concerns arise more with sons. Parents like to invest in sons' education to improve their employment prospects. These concerns are more positive in nature because of their potential future rewards. As sons are expected to remain part of their families, they are considered assets and worthy of investment. According to Hakim and Aziz (1998:729), "A son is regarded as a permanent part of the family and an asset who will reinforce the family power and status".

On the other hand, daughters are mainly associated with security (protection of female honour, chastity, and modesty) and marriage. These twin concerns are more

negative in nature. They are consumption, rather than investment, oriented concerns. Daughters consume and take resources away in the form of dowry and their moving to live with the families of their in-laws. In recent years, because of high dowry demands (Sathar and Kiyani 1998), concerns over daughters' marriages have probably intensified.

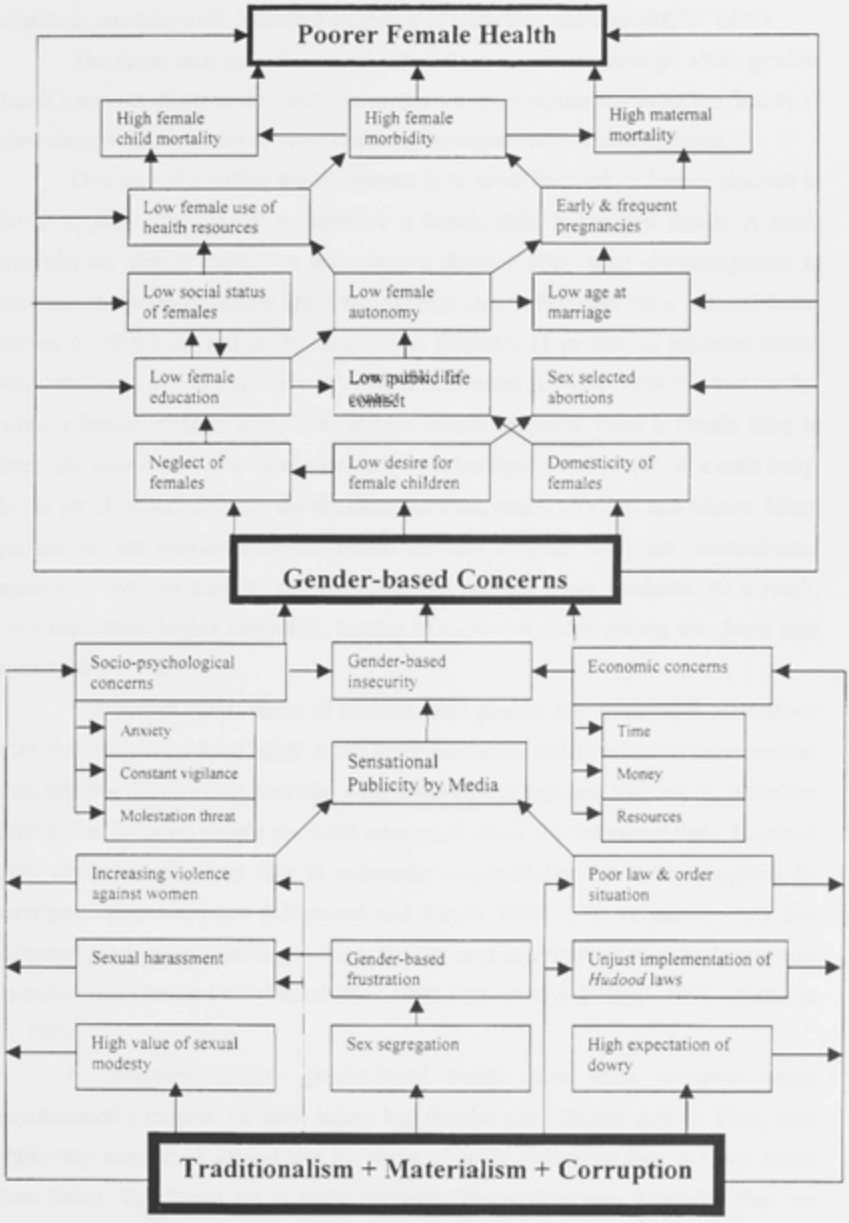
The concerns about sons are more economic in nature, while those about daughters are both economic and social in nature. Although economic concerns are usually more important than social concerns, households may have greater ability to adjust and adapt to economic realities. People can cope with a low standard of living, but social concerns are encompassing and stick in people's minds. At the same time, people have little control over concerns created by the larger society. For example, physical insecurity, especially of females, is perennial in Pakistan, and there are few measures individuals can take to improve the situation. Increasing incidences of abduction and rape have produced a worrying state, and parents are concerned over the security of girls and women.

Because people have greater adaptability to economic realities, they are not as anxious about material comforts as about social problems. Owing to lack of adaptability, social concerns are a potential source of tension and worry. In other words, people are more worried about the futures of their daughters than about those of their sons. This gender difference has an adverse effect on the health of both parents and female children.

Figure 2.1 shows a model of female health in Pakistan. The model shows a typology of people's concerns and their impact on the health of females. It attempts to show that a resurgence of traditional social values and emergent materialism, coupled with lawlessness, has produced a social environment that has caused special concerns regarding females. People are unprecedentedly concerned with their daughters' security and marriage prospects. As most people lack resources to address these social issues, they remain anxious about them. Such gender-based concerns have a negative bearing on the health of both males and females, but more so on that of females.

There are two sections of the model. The lower section shows the typology of gender-based concerns. It suggests that the social system of Pakistan has re-embraced tradition and also acquired the norms of a material culture. The traditional values have

Figure 2.1
Gender-based concerns and female health model



reinforced sex segregation, and placed a high social value on female modesty. At the same time, corruption and political instability have produced a poor law-and-order situation, resulting in an increased incidence of abduction and rape (RCIW 1997).

The upper section of the model shows the mechanisms through which gender-based concerns affect health. Because people are more concerned about the futures of their daughters, they want to avoid concerns associated with female children.

One way of avoiding those concerns is to avoid the birth of female children in the first place. Praying not to conceive a female child is the first action. A small minority are able to indulge in sex-selective abortion after using ultrasonography to ascertain the sexes of unborn children, although rare in Pakistan. "In a hospital-based survey of 30 private and public hospitals in Pakistan, 11 percent of maternal deaths were attributed to induced abortion" (Fikree et al. cited in Tinker 1998:7). And finally, when a female child is born, some people mourn her birth. Once a female baby is born, she may not receive equal treatment from her family and society to a male baby. Some people discriminate in the allocation of food, health services, and leisure. Many parents do not provide adequate health services to girls. They are discriminated against in both the quantity and the quality of services made available. As a result, girls experience higher morbidity, leading to higher mortality among daughters than sons aged 1-4 years.

The overall social status of females, both parents and children, is a lot lower than that of males. Males enjoy much more autonomy and freedom to move around than females. Females are provided with fewer educational and training opportunities than males. Because people are more concerned about the futures of their daughters than of their sons, they like to relinquish responsibility for their daughters by arranging early marriages (Mahmood and Nayab 1998). This results in early and frequent pregnancies, leading to high fertility and contributing to a high maternal mortality rate (Sathar 1987, World Bank 1989, Mahmood and Nayab 1998, Midhet et al. 1998).

In summary, greater gender-based female than male concerns create psychosocial pressures for both sexes, but females are affected doubly. First, they learn very early in childhood that by virtue of being girls, they have a lower status than males. This lower status badly damages their self-esteem. Secondly, they are repressed by patriarchal gender structures. This double burden influences their health negatively throughout their lives.

Chapter 3

Data Sources and Field Procedures

3.1 Introduction

The major objective of this research project is to assess differentials in health in urban and rural communities of two districts in Pakistan, with a focus on gender differences in health. Under this 'Gender Differences and Female Health' project title, a cross-sectional field survey (hereafter the GDFHS) was conducted in 1998 in the districts of Lahore in Central Punjab, and Bahawalnagar in South Punjab. Data were gathered from a survey of households and from focus group discussions with men and women in both urban and rural settings. This information was supplemented by several in-depth interviews with health care providers. District hospital records were also examined for the purpose of collecting statistics on the frequency of admission of male and female children. Several conversational interviews were conducted as well, with academics, civil servants, local leaders, and ordinary survey site residents.

3.2 Design of Study

The process by which a study is designed and implemented is arguably as important to its effective completion as the information itself. This is especially true in this instance in light of the minimal interest accorded in Pakistan to using gender-based empirical information for health policy and planning. The present study was undertaken in the belief that it will help health planners to make better decisions by providing empirical data about the comparative health statuses of males and females. To improve national health, especially that of females, understanding the systems of gender, and their association with health, is a prerequisite.

Research questions and available time and resources have a strong bearing on the design of a research project. Given the time and resource constraints, a cross-sectional survey of rural and urban communities in two districts in the central Pakistani province of Punjab was conducted in 1998. A cross-sectional survey usually has limited scope in testing hypotheses concerning exposure and disease, but it can provide useful analytical information about health and disease in communities. The major purpose of this study is

to analyse the different health status of males and females, a purpose to which a cross-sectional survey was deemed suited. Moreover, this research examines differential risks to males and females in local gender systems, so as to potentially reveal an association between gender and health.

3.2.1 Universe, Background, and Selection of Survey Sites

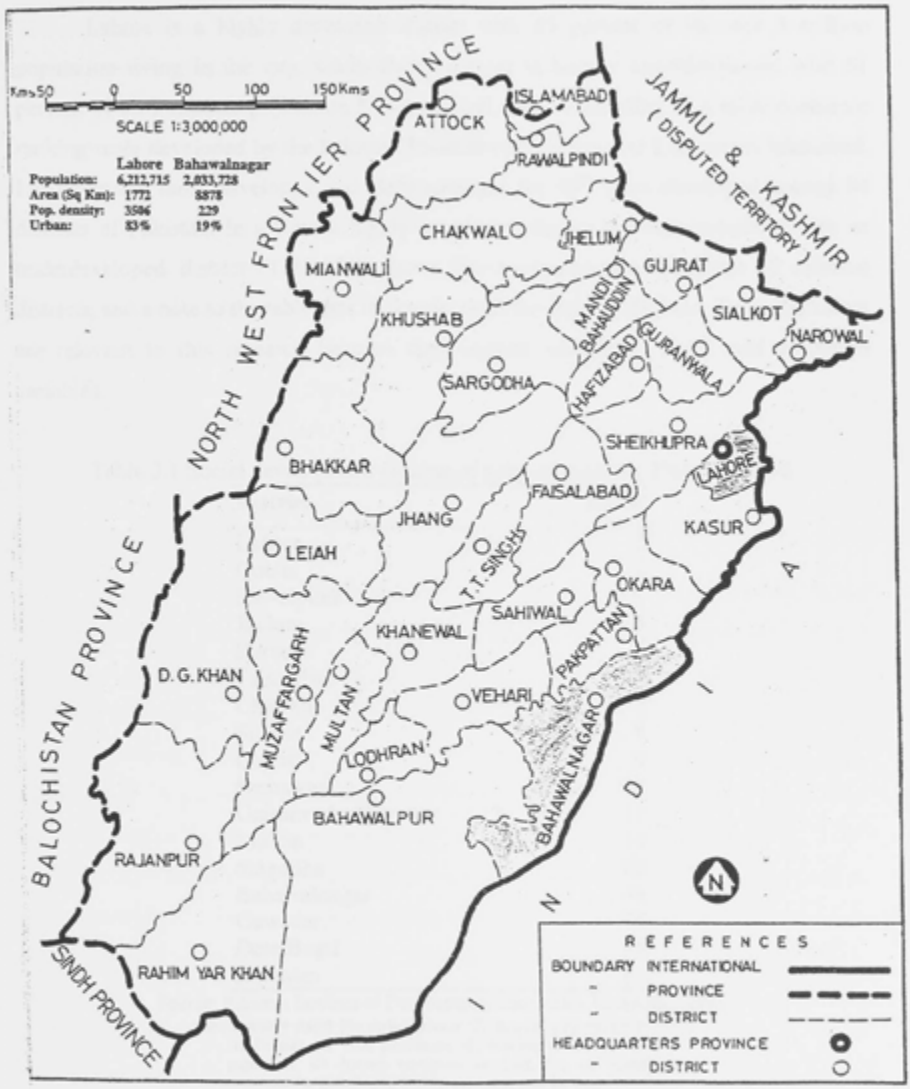
Persistent poverty and maldistribution of resources have resulted in poor health all around Pakistan, but gender inequity is the root cause of poorer female than male health. Social structures affect everybody's health, but not all people are affected the same way. Some structures may be good for some people but not for others. The inequitable structures of gender have affected the health of females from all socio-economic strata, but the health of females from lower socio-economic strata is expected to have been influenced most severely.

People from the upper socio-economic classes mitigate the impact of an adverse gender environment with their socio-economic resources. The poorest of the poor, however, are too preoccupied with their survival to notice it. In between, people from the lower middle classes have easy access to basic needs like food, clothing, and shelter, but do not have sufficient means to offset the impact of gender-based economic and social concerns. For example, the marriage of children, especially of daughters, has become a serious social problem, especially for lower middle class parents. Owing to socio-political instability and a deteriorating law and order situation, the protection of girls has become harder. The poorest of the poor are also faced with appalling gender-based insecurities, but they are too engrossed in with obtaining their day-to-day livelihood to have much time to worry about social and gender matters. In brief, people from the lower socio-economic classes are hit hardest by inequitable gender structures. But because they have more time to be concerned about such structures, people from the lower-middle socio-economic strata were deemed best suited to being the universe for this survey.

The Districts of Lahore in Central and Bahawalnagar in South Punjab were selected for collecting data. Figure 3.1 is a map of Pakistan showing the location of Punjab Province, and Figure 3.2 is a map of Punjab Province showing the locations of Lahore and Bahawalnagar Districts.

Figure 3.1 Pakistan showing location of Punjab province

Figure 3.2 Punjab province showing locations of Lahore and Bahawalnagar districts



Lahore is a highly developed district with 83 percent of its over 6 million population living in the city, while Bahawalnagar is largely underdeveloped with 81 percent of its 2 million population living in rural areas. According to a socio-economic ranking scale developed by the Pakistan Institute of Development Economics Islamabad, Lahore is the most developed and Bahawalnagar the 46th most developed among 94 districts of Pakistan. In a way, a highly developed district is being compared with an underdeveloped district. Table 3.1 shows the socio-economic rankings of selected districts, and a note to the table lists indicators used for ranking districts. Those indicators are relevant to this research because they include schooling, health and sanitation variables.

Table 3.1 Social development ranking of selected districts, Pakistan, 1996

District	Rank[a]
Lahore	1
Quetta	2
Rawalpindi	3
Jhelum	4
Karachi	5
Faisalabad	6
Chakwal	7
Sialkot	8
Gujrat	9
Peshawar	10
Gujranwala	11
Multan	16
Sargodha	20
Bahawalnagar	46
Gawader	75
Dear Bugti	84
Kohistan	94

Source: Pakistan Institute of Development Economics, Islamabad, 1996

a **Indicators used for calculating 'Z' scores are given below:**
(1) Doctors per 1000 population, (2) Patients treated per 1000 population, (3) Primary enrolment for boys (%), (4) Primary enrolment for girls (%), (5) Secondary enrolment for boys (%), (6) Secondary enrolment for girls (%), (7) Literacy rate-male (%), (8) Literacy rate-female (%), (9) Households with access to water (%), and (10) Hospital beds per 1000 population

Allama Iqbal Town was chosen for the urban part of the Lahore fieldwork. Allama Iqbal Town is a generally middle class suburb. On the basis of discussions with academics at Punjab University, it was felt to contain pockets of lower-middle class settlements. It is a relatively new housing development with houses built on different sized plots. Most plots ranged in size from 3-20 marlas (675 sq. feet to 4500 sq. feet). Some Blocks had larger proportions of houses built on small plots (3-5 marlas or 675-1125 sq. feet). A map of Allama Iqbal Town was acquired through a local real estate agent and three blocks with large clusters of houses built on small plots were identified. These three adjacent blocks, named Kashmir, Zeenat, and Huma, constituted the urban survey site in Lahore.

In rural Lahore, Talab Sarai was the selected survey site. This is an old village located at the intersection of Lahore and Kasur districts. The population of Talab Sarai is nearly 10,000. It is a relatively large village surrounded by many industrial units. Some women work in nearby vegetable packing factories; according to one resident's count, about 150 women were working in those factories at the time of the survey.

The other selected district for the survey was Bahawalnagar. Nazir Colony, Faisal Colony, Nadirabad and neighbouring housing clusters constituted the urban survey site of Bahawalnagar District. In comparison to Lahore, which exhibits substantial socio-economic disparities, Bahawalnagar, being less developed, has few socio-economic variations among communities, which made it harder to choose lower-middle class communities. A reconnaissance visit to the city and consultations with local field researchers led to the selection of the listed communities.

Villages in Bahawalnagar are small compared to those in Lahore. It was hard to gather a sample of 500 households from two villages, so the fieldwork was conducted in several villages, namely Kot Bahawal Bakhsh, Malik Pura, Basti Rojhanwali, Chak Hotiana, Bala Arain, Basti Dhudian, Toba Jamal Din, and Kot Lakhoo Shah. These villages were mostly selected for logistical convenience. All were scattered in close proximity to Bahawalnagar City.

Originally it was decided that 400-500 interviews from each of the four urban and rural survey sites would be conducted. In total 1733 interviews were completed successfully, the gender, geographic, and urban-rural breakdown of interviews being

given in Table 3.2. The fieldwork was generally carried out as planned, but certain gender-related contingencies affected field activities. In rural areas of both districts, female interviews fell short of the minimum target of 200, because of general social constraints on female interviewers' work in unfamiliar environments. In rural Bahawalnagar, 187 female interviews were completed, while in rural Lahore only 134 interviews could be completed. Gender-related factors led to the last leg of female interviewing in rural Lahore being abandoned, causing the substantial shortfall in those interviews. This is discussed further in Section 3.11.

Table 3.2 Number of completed interviews by urban-rural residence and gender

	Lahore		Bahawalnagar	
	Urban	**Rural**	**Urban**	**Rural**
Male	275	205	231	235
Female	253	134	213	187

Source: GDFHS 1998

The intention was to interview either a male or a female from each household. Many times, men were not at home and so were interviewed at work, on farms or in shops. The interviewers were instructed to ask any potential respondent whether anybody from his/her household had been interviewed before. If an interview representing the household had already been done, they were to bypass that respondent. However, as respondents were not necessarily aware of previous interviews, duplication of households cannot be ruled out completely.

3.2.2 Data Collection Operations

Quota sampling was used to collect the data. In the strict sense of the word respondents were not randomly selected. A non-probability sampling design was adopted for several reasons. A limited budget was an important constraint, discouraging the use of sampling options that incorporated time-consuming and expensive call-back procedures. Second, this was a localized study, and was not meant to 'represent' Pakistan, or even the broader regions (Lahore and Bahawalnagar) in which it was conducted. Third, segregation of interviewers by gender was a cultural requirement. Male interviewers

interviewed men and female interviewers interviewed women, and could not work in the same localized area at the same time. Accordingly, drawing male and female interviewees from same areas would have added complexity and cost, with more chance of individual households being double-enumerated. Interviewers of one sex would have had to cover an area first, and keep very clear records of the dwellings they visited to avoid duplication when those of the other sex later covered the same area. To minimize the risk of interviewing both husband and wife from the same household, allocation of different blocks of houses to male and female interviewers was deemed advisable.

Teams of male and female interviewers were taken to each survey site, and different residential blocks were assigned to those of each sex. Interviewers approached houses in an assigned block door to door, and on finding an eligible respondent conducted an interview on the spot. Women were mostly home and available, but men often were not. Except in urban Lahore, the procedure followed to obtain male respondents was to first ask about the availability of an eligible male, and then if he was not available to ask where he worked. If he was working on a farm or in a nearby shop, the interviewer went and interviewed him at his place of work. Sometimes other eligible respondents (residents of the same locality) were found in other nearby shops and interviewed as well. Some such interviews may also have been conducted without ascertaining residential location precisely, and this may have resulted in a few instances where either both spouses from a household were interviewed, or interviewees were not residents of the survey site. These means of locating respondents were followed until the quotas for males and females at particular survey sites were filled. As previously indicated, before starting an interview the interviewer routinely asked whether the interviewee's spouse had already been interviewed.

In urban Lahore, male respondents usually were neither available at home during working hours nor able to be interviewed at work during those hours. They mostly were interviewed after-hours or on weekends. In rural Lahore, the area within the village assigned to female interviewers included a distinctive cluster of Christian women, while in urban Bahawalnagar nearly one-third of male respondents were interviewed in shops or in a relatively large bazaar nearby. In this case in particular it is possible that some male respondents did not live in the selected residential area. The survey site in rural

Bahawalnagar comprised several small villages, and male and female interviewers went to different sections of a village or to different villages. This procedure was adopted to minimize the chance of conducting two interviews with members of the same household, although the possibility of this having happened cannot be ruled out completely.

3.2.3 Drawbacks of Sampling Approach Adopted

The sampling method adopted for this research was quota sampling. The design required interviewers to complete a pre-specified number of interviews with eligible respondents of their own sex at a given survey site. Every house within a survey site was contacted until the required number of interviews with males and females at that site had been completed. This less-than-perfect sampling procedure may have introduced some biases into the sample. For example, a cluster of Christian women comprising six percent of the female subsample was interviewed in rural Lahore.

This inclusion of a group of Christians in the rural Lahore female subsample may have influenced the research findings to some extent, as religion potentially can influence behaviours like the observance of *purdah* (seclusion), or segregation of the sexes. These Christian women were married to Christian men, and supposedly were not subject to the dictates of Islamic religion as such. However, local culture may have influenced them much as it did other Muslims in the village. Attitudes towards work also vary between Christian and Muslim women. Due to observance of *purdah*, Muslim women typically are reluctant to work in male-dominated factories, while Christian women are less religiously constrained. This is evident from the fact that 50 percent of the Christian women and only 15 percent of the Muslim women interviewed in rural Lahore were formally employed. At the same time, it must be noted that both Christians and Muslims were Christians and Muslims by birth, and had lived in the same socio-cultural and economic environment for decades. It thus seems safe to assume that many behavioural attributes of adherents of the two religions were the same. No Christians were found at the other three survey sites, which may have influenced comparisons among sites. However, due to the small proportion of Christian women in the rural Lahore female subsample, except with respect to employment, the comparative influence probably is negligible.

Caste is an important determinant of social position in the province of Punjab. It is a major determinant of customary codes of conduct, and the behaviour of individuals at home and in public is greatly influenced by it. Men's attitudes towards women and their work vary with caste. In this survey, just about 40 percent of respondents in seven of the eight gender/survey site combinations were Rajputs or members of allied castes, while in the eighth (males/urban Bahawalnagar), 60.2 percent of respondents belonged to this category (see Table 4.3 in Chapter 4). In other words, the Rajput and allied castes were the dominant caste at all survey sites.

It is possible that local concentrations of Rajputs at some survey sites may have resulted in them being covered with disproportionate intensity compared to other castes. This may partly explain the high proportion of males interviewed in urban Bahawalnagar who were Rajput, as may the substantial proportion of male respondents who were interviewed in a Bazaar adjacent to the survey site. These respondents were mostly shopkeepers, and it is possible that occupational and class biases with the potential to have influenced survey results were introduced by this strategy.

Gender differences are socially constructed, and caste plays an important role in shaping gender roles and gender differences. For example, Rajput men, in contrast to men from other castes, are believed to be more sensitive to family honour and the sexual conduct of their women. It is possible that membership of the Rajput caste could have influenced the results of the survey substantially. The wives of Rajput men could well experience a more belligerent form of male domination, which may have influenced their self-assessed health negatively. For example, in urban Bahawalnagar, among the two major castes, 49 percent of Rajput and only 24 percent of Arain women reported 'fair-to-poor' health (Table 6.7). This evidence is valid in the context of an assumption that most Rajput women were married to Rajput men, an assumption that is fairly safe given that about 90 percent of Pakistani marriages occur within castes (Hussain 1999). Inter-survey site results could have been influenced by the high concentration of Rajputs among males interviewed in urban Bahawalnagar, but no unusual findings likely to be attributable to this concentration were detected.

Due to the non-availability of male respondents at home, especially in urban Bahawalnagar, some men who were not residents of the selected survey sites may have

been included in the site samples. These men are expected to have been of similar socio-economic status, as they were working in a similar environment. However, along with the tendency, other than in urban Lahore, to attempt to locate potential male respondents who were not home only if employed nearby in situations conducive to workplace interviews, it is possible that, for example, shopkeepers were oversampled and white collar workers undersampled. Such an occupational bias may in particular have affected the urban Bahawalnagar male subsample, since in urban Lahore the difficulty of conducting workplace interviews forced male interviews to be conducted mostly at home out of work hours, while at the two rural sites men mostly worked close to home. That said, at the rural sites, for logistical and cultural reasons, there was absolutely no after hours interviewing of men who were unavailable during the day.

Male and female respondents were selected from different clusters/streets at the selected survey sites. This procedural limitation may have influenced the comparability of samples of men and women at individual sites. It is possible, for example, that the households represented by female respondents in urban Lahore were socio-economically different from those represented by male respondents. This possibility reflects the fact that female interviewers worked in an area of smaller sized housing units than were typical of the area in which male interviewers worked. This reality might partly explain a huge gender differential in education, with 57.4 percent of male respondents and only 26.5 percent of female respondents having a college or higher education (see Table 4.2). Such educational variation could have influenced the two sexes' health care practices and attitudes in respect of their male and female children.

The findings of this survey are not truly representative because the samples were not drawn randomly. The results, however, can be loosely extrapolated to the larger societies within which the survey sites are located, Bahawalnagar district in South Punjab and Lahore district in Central Punjab.

3.2.4 Respondents and Their Selection

Another area of concern was to determine who should be interviewed in administering the structured questionnaire. Deciding whom to interview depends on the type of information and degree of detail required, the individuals who can most

accurately provide it, and the amount of time and resources available. In theory, it would be best to interview the members of a family who are most intimately involved in the activity for which data are required. In this instance, both mothers and fathers were likely to be involved in family health matters, and hence both were logical choices as interviewees. They could provide information not only on their own health but also on that of their offspring. However, on some issues, income for example, fathers may have more accurate information than mothers.

Both mothers and fathers were interviewed. They were asked to assess their own health status. They were also asked questions about various aspects of their children's lives, including health care practices. Mothers generally stay home and are closer to their children. They usually are responsible for the health care of their children, especially the young ones. Their extensive and intensive interaction with their children is more likely to reveal accurate information about the lives of their children, including their health status. Fathers usually stay outside the homes and have fewer opportunities for interaction with their children. However, men in male-dominated Pakistani society usually are the decision-makers at household level. In this context, women share household matters with their husbands, including family health issues. Such a situation makes Pakistani men competent to report on family health issues.

Men and women who had at least one school-age child were eligible to be respondents. One of the research objectives was to identify any possible discrimination between the way sons and daughters were treated. It has been reported in the literature that parents in South Asia discriminate against girls in the provision of health care services and education. The selection of only those parents who had at least one school-age child was decided upon with a view to uncovering any discrimination in schooling. A consequence of this decision was to reduce the coverage of children of pre-school age, by excluding households containing *only* pre-school children.

3.2.5 Sample Size and Sampling Unit

The question of sample size cannot be decided in isolation but must be viewed in the context of sampling design, the substantive research issues, proposed plans for analysis, and time and resource constraints (Kish 1965, Alreck and Seetle 1985). Since this survey included many variables with different variances, an attempt was made to

interview as many respondents as possible, within resource constraints. In total about 2000 interviews, 250 each with men and women from the four survey sites, were planned. However, due to logistical and resource constraints, only 1733 interviews were completed successfully (see Section 3.11).

In a strict statistical sense, a sampling unit contains the elements of the population for which information is sought and is used for drawing a sample from the target population (Kish 1965). In this study the household was the sampling unit. Population elements and sampling units are not, however, always the same. In the first stage of a multi-stage sample, households are the sampling units. In some households, however, more than one family may reside. Therefore, families, not households, constituted the sampling unit; although in the majority of cases family and household were expected to be the same.

The decision about the sampling unit (e.g., household, family) is a function of research objectives and the socio-cultural environment in which the study is located. In many studies, researchers define a household as comprising those individuals who eat from the same pot, share a common source of food, or sleep under a single roof (Casley and Kumar 1988). In other studies, with different purposes, it may be more meaningful and conceptually more sound to define a household differently. In this study, family is the sampling unit and comprises a husband, his wife, and their children, with the proviso that at least one child was of school age. The selection of family as the sampling unit was decided upon on the basis that families are the settings in which gender roles are played out; gender roles that are suspected of contributing substantially towards the differential health of men and women and boys and girls.

3.3 Scope and Limitations

The extension of research findings from sampled survey sites and households to larger populations is commonly an issue of considerable concern to researchers. The ability to generalize is often equated with the degree to which the researcher followed probability sampling rules. Quota sampling method was adopted for this research and an attempt was made to locate eligible respondents even during after hours or weekends. A sort of loose call back procedure was adopted to locate eligible respondents. Efforts were

made to conduct as many interviews as possible within given resource and time constraints. In total 1733 interviews from the four survey sites were completed.

The use of a small probability sample in strict sense of the word may have added some confidence towards generalizing the findings, however, having relatively a large sample makes it prudent to generalize the findings. It is useful to think of extending the research findings to a larger universe in terms of 'extrapolation'. In this context, 'extrapolation' refers to "modest speculations on the likely applicability of findings to other situations under similar, but not identical conditions" (Cronbach 1980:235).

Generalizations based on quota samples can be dangerous sometimes, but in this case, interviewers went to the survey sites during after hours or during the weekends to find respondents. The interviewers were given certain 'quotas' to be filled from a single locality but to complete the sample they had to visit the locality several times. In such a situation, the sample is less likely to be biased. The interviewers interviewed respondents who were available at the time of their visits. In case of women, there may be some under-representation of working women in both urban and rural areas. Because most Pakistani men work, they were interviewed either during after hours or at their work places. In men's case, however, there may be slight under-representation of men from rural areas who worked outside their villages.

Results of the present study may not be generalizable to the Pakistani population as a whole, or to segments of that population from the highest and lowest socio-economic strata. The findings from Bahawalnagar District may, however, be extrapolated to South Punjab and parts of Sind province, where a similar feudal culture prevails. Similarly, the findings from Lahore District can be extrapolated to lower-middle socio-economic segments of larger populations in central Punjab.

3.4 Questionnaire Design

The basic consideration in questionnaire design is how respondents think about and remember activities of interest to the researcher. What terms or concepts do they use to describe their situations and problems? Secondly, which members of the household can best provide information about issues of interest? Thirdly, what is the likely range of responses to questions in which the researcher is interested? Prior knowledge about

survey communities or careful reconnaissance visits to proposed survey sites can provide a lot of relevant information. In the case of Lahore, both urban and rural survey sites were visited. The sites were discussed with academics at Punjab University, Lahore. However, in the case of Bahawalnagar, discussions with the Director, Social Sciences Research Centre (SSRC), who was a former resident of Bahawalnagar, were deemed sufficient to take relevant decisions. Some of the important issues regarding questionnaire development are discussed below.

Prior knowledge about local dialects and concepts used by gender and health system participants (men and women) helped improve the format of questions. People were asked questions using local dialects and concepts to which they could relate and which they could understand. For example, a question regarding concerns about the lives of their sons and daughters was asked in the locally understood dialect, *'Mundian tay kurrian thay bare wich tuanoo aj kal kerray kerray fikar nain'* (What sorts of concerns/worries do you have about your sons and daughters?). Another question sought information on dowry and bride price. Asking a direct question about bride price is culturally inappropriate. The local concept of bride price in Bahawalnagar, *'Sona kar kay lai jao'* was used to seek information on marriage. This concept literally means 'make the girl beautiful yourself and take her with you'. Culturally it means that the groom's family spends money on marriage ceremonies at both the bride's and groom's houses. *'Allah Wastay'* was another concept giving culturally appropriate meaning to a marriage custom. The concept literally means, 'in the name of God', and conveyed the idea that no bride price is taken from the groom's family. Without prior knowledge of such cultural concepts, the form or tone of some questions might have offended and might have had a strong effect on the survey.

In this study, the questionnaire was mostly structured (see Appendix A). Although pre-coded responses were used, lists did not preclude interviewers from writing in other responses. In fact this was encouraged, and interviewers were instructed to write verbatim responses when deemed desirable. There were a few open-ended questions as well, and the questions were short and simple.

Separate versions of the questionnaire were used for mothers and fathers. They were the same, except that the female version included some additional questions asked

only of women about female autonomy. The title page of the female questionnaire was printed in red, while that for males was blue, for easy identification. The survey instruments covered birth history, age and sex composition of family, schooling and education, psycho-physical health, household morbidity during the month before interview, household mortality history during the two years before interview, gender relations, son preference, and questions on gender based concerns (GBCs), marriage and religiosity. The GBC section comprised a set of questions on perceived relative concerns and pressures experienced given the sexes of respondents' children.

3.5 Translation of Interview Schedule

When a questionnaire is written in a language different from that in which it will be administered, translating and back-translating it seeks to ensure that translated concepts are conceptually equivalent. Translating the questionnaire into the local-language forces the researcher and interviewers to discuss the meaning of each concept and employ terminology that conveys the intended meaning.

The questionnaire was translated into the national language, Urdu, with the help of a social scientist of Pakistani origin in Australia. During the training of interviewers, both English and Urdu versions were used. Questions were asked in the Urdu and Punjabi languages in both districts, but the dialects in the two districts differed. Therefore, it was decided to print the questionnaire in English and use local dialects to ask questions. All interviewers had graduate or postgraduate degrees with bilingual (English and local dialect) capabilities. Equivalent local-language words and phrases for concepts used in the questionnaire were discussed and decided on in both districts. Pretesting of the questionnaire in both districts and prior discussions with an academic of Bahawalnagar origin working at Punjab University and field researchers were helpful in identifying local terms for various concepts used in the questionnaire.

3.6 Interviewing

Quality interviewing demands minimizing sources of potential bias. Recruitment of good interviewers and provision of proper training cannot be overemphasized. Some respondents, especially in the presence of other local residents, may give socially

desirable answers. The interviewers were warned that in such situations, responses given may not be valid. Excessively long interviews can have a negative effect not only on respondents but also on an interviewer's ability to ask questions clearly and to record exactly what was said. In this study, the interview time varied from a few minutes to more than an hour, depending on factors such as family size, the nature of events in the family, the skipping sequence, the ability of respondents to recall and respond readily, and the skill and experience of interviewers. Although the survey achieved the target number of interviews at all but one survey site, it was felt that the questionnaire was too long for some respondents, and that some of its questions could have been dropped.

3.6.1 Interviewer Selection

The selection of effective interviewers to conduct structured interviews was an important task if valid, reliable data were to be collected. Specifying the skills of an effective interviewer is very difficult, since each interviewer potentially can bring both advantages and disadvantages to the interviewing process. However, it should be emphasized that interviewers must be able to communicate with respondents in their language without underlying biases or tensions that may influence responses.

What constitutes an effective interviewer changes with the type of instrument used, the data desired, and the local environment. The development of rapport with respondents is critical, and having people trained and experienced in socio-psychological aspects of human behaviour may be helpful in facilitating interaction. Interviewers were hired who could effectively relate to personal characteristics of individual respondents; that is, interviewers had local backgrounds.

An informal approach to selecting interviewers was adopted. Faculty at the Department of Sociology and the Director, Social Sciences Research Centre at the University of the Punjab helped in identifying suitable interviewers for both districts. This institutional help was enlisted to minimize surprises, and facilitate sustained planning of the interviewing process. If there was no prior information about potential interviewers' characteristics, they might have resigned in the middle of fieldwork causing serious problems for its completion.

The different micro-cultures of the two field districts posed a challenge for interviewer recruitment. Bahawalnagar District is feudal and traditional in nature while Lahore is modern, industrial, and urbanized. Initially it was thought that only one team of interviewers, comprising both males and females, would be recruited for both districts, to avoid duplicating recruiting and training efforts. However, the different regional dialects and varying social conceptions, for example about marriage-related customs, led ultimately to the selection of two separate teams of ten persons, each comprising five male and five female interviewers.

In both districts these teams worked in both urban and rural areas. With the exception of one male interviewer from Bahawalnagar, all had degrees from Punjab University, Lahore. Most were postgraduate students of social science, mainly from the field of sociology. Nearly three-fourths of them had prior interview training and fieldwork experience. On top of that, three had extensive research and community experience due to their current jobs with different research and development organizations. One of them was working as a social organizer with an international community development organization. The other two were working with market research organizations, like Gallup International.

For Lahore District, four out of the five female and three out of the five male interviewers were local. The rest had lived in Lahore for many years. Two males from Bahawalnagar who had lived in Lahore during their postgraduate education also assisted in interviewing in Lahore. Lahore is predominantly urban (more than four-fifths of the population live in the city), and adjacent rural areas are well connected with the city. Therefore, city-based interviewers were deemed suitable for interviewing in both urban and rural areas. In Bahawalnagar, all interviewers lived in the city. As the district is mostly rural (more than four-fifths of its population live in villages), city-based interviewers were exposed to village life. Therefore, the same team of Bahawalnagar interviewers was deemed suitable to collect information from both urban and rural survey sites.

In Lahore, applications were invited for selection as interviewers. All of them were recommended by the Director, SSRC and the Sociology Department. After necessary training, fieldwork was started. After pretesting, more interviewers were

needed. By this time, several more potential interviewers were interested in the job, and it was necessary to become selective in choosing interviewers. Ultimately there was a good team of five male and five female interviewers. In Bahawalnagar, the choices were limited and only those people who were recommended by either the Director, SSRC or the main contact person in Bahawalnagar were recruited.

3.6.2 Training

The primary objective of interviewer training was to teach interviewers the information and skills required to interview people with minimum personal influence on the information recorded. Although interviewers were well educated, they had to be apprised of the research objectives, the need to establish rapport, the socio-cultural sensitivity of some questions, logistical issues, uses to which the data would be put, definitions of terms used in the questionnaires, organization of the questionnaire, and their jobs and responsibilities. The underlying intent of each question was explained and discussed with interviewers. Issues concerning the recording of answers and probing of respondents also were discussed.

The significance of morale among interviewers should not be underestimated. An attempt was made to develop feelings of shared responsibility. The importance of their contribution to the research was stressed. A sense of personal attachment to the survey was invoked by telling them that it was a serious research exercise. A Ph.D researcher could use secondary data, but the present researcher wanted to do something original and new. Such remarks, it is believed, aroused interviewer interest and emotional attachment due to the local nature of the work. Ongoing psychological conditioning of the interviewers aided considerably the successful completion of the survey.

In Lahore, a training camp was established at the Department of Sociology, Punjab University. Interviewers were given a detailed brief about the research and its objectives. The concept of gender was clearly defined as socially produced differences between males and females. Variations in the reproductive functions of men and women were due to biological differences, but the bulk of other male-female differences were the result of local social systems. For example, distinct dress codes and women's long hair were direct products of social systems, rather than of biology. Interviewers were told that

certain occupations were reserved for men and others for women. These examples were used to make clear distinctions between sexual and gender differences.

In Bahawalnagar, the training camp was established at the WAPDA (Water and Power Development Authority of Pakistan) Rest House. The pattern of training adopted in Lahore was followed in Bahawalnagar, and the experiences of Lahore helped to improve training strategy.

Each interviewer was given a copy of the questionnaire to read overnight. The objective of each question was explained. Local-language equivalents for various concepts in the questions were discussed, and decisions were taken as to the local concepts to be used.

Formal pretesting of the survey instrument was done in non-sample communities in Lahore. After the pretest, questionnaire and field problems were discussed with interviewers. This process refined their training through interaction among themselves. A competitive spirit and the expectation of performance-oriented letters of reference created an incentive to do quality, conscientious work. Evaluative feedback beyond supervision served as in-service training for interviewers.

During training sessions, subjective neutrality was emphasized. Interviewers were asked not to influence or feed responses to respondents. They were instructed not to engage in arguments or political discussions with respondents. People in poor communities often attach glimmers of hope to research exercises as possibly offering personal or community benefits. Sometimes, respondents think that interviewers are government functionaries and that they could be affected by the research. Or, sometimes, field workers themselves create false hopes to secure co-operation in interviewing. They were asked not to create impressions such as these, as such behaviour was unethical and could create problems for future research in the same communities.

3.7 Supervision

Supervision of interviewers was a major task. It entailed providing supplies and salaries to interviewers, provision of logistical support, resolving interviewing problems, public relations with community and political leaders, walking the streets of survey sites to see how interviewers were doing and let them feel that help was at hand if needed,

providing moral support to interviewers, and collecting completed questionnaires. Incorrectly filled out questionnaires were returned to interviewers for rechecking with respondents, if needed, and completion. Owing to the high level of mistrust among some members of field communities, public relations was an important task. Although teams of interviewers went about their task with the prior approval of local leaders, some residents were apprehensive about their local leaders. Therefore, meeting and talking with average residents was important, to muster their co-operation and enable completion of the fieldwork.

3.8 Field Operations

In Lahore, interviewers gathered at the Department of Sociology, Punjab University in the morning to travel to field sites. Male and female interviewers would start their work at pre-decided locations. They would continue working until evening with a lunch break in between. They would knock at every door to assess the availability of eligible respondents. If an eligible respondent of the appropriate sex was found, an interview was conducted, otherwise the next door was knocked on. Before sunset, interviewers were expected to report back at the survey vehicle. On return, all female and some male interviewers were dropped at their homes for security and cultural reasons.

Female respondents were normally available during daylight hours, as they were mostly housewives and could readily be interviewed there. Male respondents, however, had often gone to work, so that some male interviewers had to work during the evenings or over weekends. In urban Lahore and Bahawalnagar, male respondents were not usually home and they were called back during evenings or weekends. In rural areas, if an interviewer was told by the household that the male respondent is at the shop or farm, he was interviewed at the workplace. A loose call back procedure was followed call back procedure was actually followed and the available male respondents were interviewed. In Bahawalnagar, rather than there being a central assembly point, interviewers were mostly picked up from their homes and dropped back after work. This was practical and efficient because Bahawalnagar is a small city.

3.9 Questionnaire Editing and Data Entry

Individual interviewers were responsible for editing their questionnaires at the end of each work day. However, to standardize coding of all questionnaires, a senior female interviewer edited all women's questionnaires and a male editor went through all the men's questionnaires. This effort helped minimize errors and inconsistencies.

Foxpro computer software was used for data entry purposes. A special program was written to minimize data entry problems. The ranges for each question were predefined so that key punching errors could be minimized. One of the male interviewers was a trained keypuncher and co-ordinated the data entry. When minor difficulties such as ambiguous coding or miscoding occurred, he was ready to help. After overseeing data entry preparations, once the data entry process started, data management became a routine, and the author was able to get on with other things.

Following computer entry, the data were cleaned for manual errors and miscodes. General frequencies were printed and some inconsistencies found and corrected. The data were converted into an SPSS file and copied to floppy diskettes for onward transportation to Australia. To be safe, they were also emailed to Australia.

Although all possible care was taken at each step of the data collection process, the computer operations managers reported some problems. These included overwritten codes, difficulty reading the questionnaire due to its small font, missing codes, and missing pages in a few questionnaires.

3.10 Qualitative Methods

Qualitative research techniques, focus group discussions (FGDs) with local men and women, in-depth interviews with health care providers, and conversational interviews with men and women were also used to collect data. All FGDs with men at all survey sites were personally conducted. However, owing to the sex-segregated culture of Pakistan, two experienced women from among the teams of female interviewers conducted FGDs with women at the respective survey sites. "Social chats" were also used to collect information useful to interpretation of the data.

3.10.1 Focus Group Discussions

In FGDs, semi-structured interview guides were used (see Appendix C). In addition, an attempt was made to discuss items covered in the questionnaire. The FGDs were conducted towards the end of interviewing but during the course of interviewing. The FGD participants were usually eight to ten in number, and were encouraged to discuss issues among themselves. Cross-arguments and live debates help bring out the real dynamics of research issues. These FGDs were helpful in determining if it was necessary to pursue certain issues in the analysis of structured interviews in order to obtain relevant quantified information. Moreover, qualitative data, especially from FGDs, provided insight into the meaning of the data and helped interpret statistical relationships.

In most cases, FGD meetings were held in a participant's home. This practice proved workable in most cases, although in one village selected participants were reluctant to come to a local landlord's house. In this case, the venue was changed and the meeting took place in the courtyard of one of the participants' homes.

All FGDs were tape-recorded. One of the male interviewers took notes during male FGDs and a female assistant took notes during female FGDs. All FGDs were transcribed and both recorded tapes and transcripts were brought to Australia for use in the analysis and write up. At times during the FGDs, participants became emotional, shedding more light on particular issues.

3.10.2 Interviews with Doctors

In addition to FGDs, in-depth interviews with ten general practitioners working at different survey sites were conducted. Issues related to gender-based behaviours of parents of their child patients were discussed. These issues included the sex distribution of child patients and any noticeable gender-based parental discrimination regarding the use of health care. Perceptions of doctors about possible reasons for any sex-differential health behaviours of parents were also discussed.

Generally in Pakistan, doctors are known for their lack of co-operation with social research projects. However, in this instance they seemed to be interested in the topic, and talked openly and frankly. They provided access to hospital data and shared their views

of the hospital-based behaviour patterns of parents of child patients. They also talked from the perspective of their after-hours private clinical practices.

3.10.3 Hospital Records

Hospital records did not really provide qualitative information, but are included in this section because a limited amount of data on the sex of children was explored. Statistics of the gender composition of children brought to outpatient departments or pediatric wards in three hospitals were collected. Owing to hospital-related constraints, data were collected for different periods of time. Most hospitals did not maintain statistics, and had only ledgers showing names, sexes, and ages of patients. From these ledgers, frequency counts of boys and girls were made. The broad operational definition of child patients used in Pakistani hospitals is persons aged up to around 12-13 years. The Children's Hospital in Lahore, however, had a small statistical unit which provided the age and sex composition of child patients from 1 June, 1995 to 22 April, 1997.

3.11 Field Experience

No matter how much a researcher prepares, planning cannot anticipate all possible contingencies. The researcher must be flexible in terms of both the data to be collected and the execution of particular tasks. Flexibility in the collection of qualitative information was particularly important in order to obtain insights into the dynamics of gender systems and health behaviours. It was necessary to meet local leaders, and even ordinary people, explain the study to them, and solicit their co-operation. One cannot simply arrive at a survey site and launch into administering a survey instrument.

Allama Iqbal Town, Lahore, was fairly a new but crowded locality. Being congested and having close neighbourly relations, people previously used to feel safe and secure, but several recent daylight robberies had heightened felt-insecurity among local residents. Residents were reluctant to open house gates without clearly identifying doorknockers. Some houses had automatic locks on their main gates, which did not exist in the past. This heightened insecurity created a challenge for interviewers. Women at home were suspicious of *door knocks*. The idea of advertising the research project over local mosque loud speakers was considered, but found inappropriate for various socio-

political reasons. Girls and women in Pakistani culture are considered submissive and harmless, but in the context of perceived high levels of insecurity, female interviewers' appearances at respondents' doors were at times suspected to be a trap, and residents were reluctant to open their doors. Some interviewers faced difficulties of this type in obtaining access to respondents, especially in urban Lahore.

A sudden publicity campaign by the government about the forthcoming Census did, however, help field interviewers get a better response from local residents. The 'Housing and Population Census of Pakistan' was due in 1991, but successive governments had postponed it. Its launch was uncertain even a few days before it started. In this context, electronic and print media began a campaign to inform the public about enumerator visits to their homes. This media campaign helped interviewers to get a better response to their *door knocks* in Lahore.

The effect of the Census on fieldwork in Bahawalnagar was, however, rather different. For the first time in the history of Pakistan, the Army conducted the Census. They were overly careful because of potential political sensitivities associated with the delay in taking the Census. As several questions were common to the Census and the questionnaire, army personnel misconceived the latter as an exercise to verify their data. This led to a personal interview, but after they were satisfied that the objectives of the present project posed no threat, no impediments were placed in its way.

The electronic media also affected field operations. For several weeks before the start of interviewing, a multinational consumer goods manufacturing company aired television commercials showing everyday women using everyday language in the everyday environment of a poor household. These commercials were different and made an impression on people. Some women thought that survey-related FGDs were linked to them, and were reluctant to join in such group meetings. Indeed, one FGD was aborted because several women left the meeting after someone whispered that it was linked with these television commercials. A camera held by an interviewer helped create such an impression. The next day, another FGD was conducted successfully.

Finally, given the inhibited and sex-segregated Pakistani culture, a mixed travel and work opportunity aroused passionate feelings between some young male and female interviewers. Emotional competition among interviewers was generated, taxing the

energies of the supervisor. Indeed, this situation was the major reason for shortening interviewing of females in rural Lahore. As a result, far fewer female interviews were conducted in rural Lahore than had been planned. Transporting female interviewers to the field was terminated while males' work continued for some time.

3.12 Summary

The fieldwork described in this chapter produced 1733 interviews, 946 male interviews and 787 female interviews, along with a significant body of qualitative data. Both urban and rural sites in the districts of Lahore and Bahawalnagar in the Central Pakistani province of Punjab were covered. Eight FGDs, one each with men and women at each survey site, were conducted. Ten in-depth interviews with health care providers were also conducted. Informal chatting with different people at each survey site was also rewarding. The fieldwork was sometimes taxing, but people were generally co-operative and helpful. Although the field workers faced certain difficulties, it was never expected that their task would be easy or smooth.

Chapter 4

Characteristics of Respondents and their Households

4.1 Introduction

Socio-economic and demographic profiles of respondents and households in the study samples are presented in this chapter. The objective is to provide background information about respondents and the members of their families from the four survey sites. First, characteristics of respondents, both males and females, are presented, while the latter part of the chapter deals with their households. The major emphasis is on respondents, as they provided all the information, and understanding their characteristics is likely to aid understanding of the analysis presented in later chapters.

There were some subtle differences in interviewing process at the four survey sites which may have implications for the data and analysis. At all survey sites, women were interviewed at home, while men were interviewed at home and at workplaces. In urban Lahore almost all men were interviewed at home, whereas in urban Bahawalnagar substantial numbers of them were interviewed at workplaces. In rural areas men were interviewed on farms, at workplaces like shops, or at home. These differentials may have implications for some interview responses. For example, the question on source of drinking water may have been answered with reference to workplace rather than place of residence. Moreover, at home, interviewers could see water pipes coming into houses, whereas at places of work they had no visual access to household data. Then again, owing to pervasive corruption some people may have had illegal water connections, which they could easily have avoided reporting if interviewed at work.

Within selected survey sites, male and female interviewers were allocated different areas in which to conduct interviews. There were clusters, or pockets, of households having different characteristics. For example, in rural Lahore, Christians were concentrated in one area of the survey site where interviews with females were conducted. Some castes were localized in certain streets or parts of survey sites. In urban Bahawalnagar, a small government staff colony was part of the selected survey site, and levels of education were expected to be higher in this neighbourhood where female interviews were conducted. Because distinct blocks of houses or parts of survey sites

were allocated to male and female interviewers, differentials in the characteristics of male and female respondents and their households at particular survey sites are a possibility.

4.2 Age and Sex Distribution of Respondents

Age distributions of respondents by region, urban-rural residence and gender are presented in Table 4.1. Nearly two-thirds of the respondents, male and female, from all four survey sites were aged 35-54 years. The median ages of male and female respondents are also given in the table. The median ages of males ranged from 40 to 44 years, and those of females from 35 to 40 years. The median age of all male respondents was 42 years and that of all females 38 years. Women respondents were expected to be younger because wives are generally younger than their husbands. The proportions of respondents aged under 35 years, especially of males, were small because respondents had to have at least one school-age child.

Table 4.1 Age distributions of respondents and median ages by region, urban-rural residence and gender

	Lahore				Bahawalnagar			
	Urban		Rural		Urban		Rural	
Age (Years)	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**
<35	9.8	25.7	14.6	28.4	25.5	32.7	20.0	33.2
35-44	41.1	39.1	42.9	41.8	38.5	43.1	32.3	40.6
45-54	37.1	28.1	31.2	19.4	35.5	20.9	40.9	22.5
55+	12.0	7.1	11.2	10.4	0.4	3.3	6.8	3.7
Total	100	100	100	100	100	100	100	100
Median	44	40	40	35	40	38	42	36
N	**275**	**253**	**205**	**134**	**231**	**213**	**235**	**187**

Source: GDFHS 1998 M=Male F=Female

4.3 Education of Respondents

Education is an important indicator of socio-economic status. It has a strong bearing on health and mortality among human populations because people's health-

related behaviours are influenced by their education levels. Table 4.2 presents education levels of respondents and median education levels by region, urban-rural residence and gender. Respondents from urban Lahore had the highest education profile. A little less than three-fifths of urban Lahore men and over one-quarter of women had college or higher education. The median level of education for urban Lahore men was college, and for men in urban Bahawalnagar it was primary. For women in urban Lahore the median was matriculation, while for all other respondent groups, both men and women, it was 'None'.

Table 4.2 Percent distributions of respondents by education and median education levels by region, urban-rural residence and gender

	Lahore				Bahawalnagar			
	Urban		Rural		Urban		Rural	
Education level	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**
None	12.7	23.7	51.7	79.9	37.7	52.1	68.9	92.5
Primary	3.3	7.1	24.9	6.0	16.0	11.7	15.3	3.7
Middle	9.5	14.6	14.1	5.2	18.6	7.0	10.2	1.1
Matric	17.1	28.1	5.9	5.2	16.0	17.4	3.4	1.6
College (FA/BA)	40.7	17.4	2.0	2.2	8.7	7.0	1.7	1.1
Higher	16.7	9.1	1.5	1.5	3.0	4.7	0.4	0.0
Total	100	100	100	100	100	100	100	100
Median	College	Matric	None	None	Primary	None	None	None
N	**275**	**253**	**205**	**134**	**231**	**213**	**235**	**187**

Source: GDFHS 1998 M=Male F=Female

Female respondents were at a disadvantage in education compared with men at all survey sites. Rural women fared even worse than their urban female counterparts. For example, in Lahore, less than one-quarter of urban women were uneducated compared with nearly four-fifths of rural women. The corresponding figures for Bahawalnagar were 52.1 percent and 92.5 percent.

4.4 Caste

In South Asia, caste is an important determinant of social status. It influences people's educational and occupational opportunities, especially in rural areas. Caste is a potent social institution and stratifies people in terms of social status. Dozens of castes are found all over Punjab, and it is hard to collapse those castes into a classification with a few major categories (Ibbetson 1974:11). However, with the aid of Ibbetson's pioneering work, several allied castes have been merged to make broad groupings. Several castes have lineage with Rajputs, and accordingly allied castes like Bodlas, Cahuhans, Jats, Sials, Chhadars, and Janjuas were merged with the main 'Rajput' caste (Ibbetson 1974:8). Table 4.3 shows percentage distributions of respondents according to major castes by region, urban-rural residence, and gender.

Rajputs are a major caste of the Punjab. There are numerous allied or subcastes. "The Jats have always been recruited from the Rajputs" (Ibbetson 1974:90). The Jat itself is the major subcaste of Rajputs, and about 165 tribes of Jats were found in one Tehsil (administrative unit) alone (Ibbetson 1974:90). Substantial numbers of respondents were Jats and were merged with Rajputs. Based on the 1881 Census, Jats and Rajputs together constituted 28 percent of Punjab's population. The proportion today may be even higher. According to Ibbetson, "the distinction between Jat and Rajput is in many parts of the Province so indefinite, that separate figures for these two castes can hardly be said to have any significance at all" (Ibbetson 1974:88). Over two-fifths of each of seven respondent groups, and 36.2 percent of men interviewed in rural Bahawalnagar, were Rajputs and members of allied castes.

Kashmiris are an important caste in Punjab cities. They mostly are in business and crafts. Kashmiris are a close-knit caste and help promote their kin. The classic 1882 work of Ibbetson (reprinted in 1974) says that Kashmiris "keep their own distinctions of caste and tribe in the countries whence they came", but "isolation from their fellows in a land of strangers binds them together in closer union" (Ibbetson 1974:11-12). The data show that more than 10 percent of male and 15 percent of female respondents from urban Lahore were Kashmiris, while their numbers in rural Lahore and in Bahawalnagar District were negligible.

Arain is one of the major castes in Punjab province, with a stronghold in Lahore (Ibbetson 1974:143). Arain means 'Market-gardener' (Ibbetson 1974:13), and they are usually engaged in agriculture/horticulture. Table 4.3 shows that a significant number of both male and female respondents from the Arain caste were found at all four survey sites. Kumboh is an allied caste of Arain (Ibbetson 1974) and was merged with Arain. The other major castes were Sheikhs and Syeds. Occupational castes like Nais (barbers), Lohars (iron smiths), Tarkhans (carpenters), Mochis (cobblers), and Dhobis (launderers) were quite common in rural areas.

Table 4.3 Percent distributions of respondents by caste, by region, urban-rural residence and gender

	Lahore				Bahawalnagar			
	Urban		Rural		Urban		Rural	
Caste	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**
Kashmiri	10.5	15.4	1.5	1.5	0.4	0.5	0	0.5
Arain	13.5	10.3	13.7	23.9	8.7	25.8	14.9	16.6
Rajput & allied castes	40.0	45.1	42.0	40.3	60.2	43.7	36.2	41.2
Sheikh	12.0	10.3	2.0	4.5	5.2	5.6	2.6	3.7
Syed	7.6	6.7	5.9	4.5	0.9	3.3	1.7	0.5
Occupational castes	0.4	0	8.3	10.4	0.9	6.6	4.3	12.8
Other	16.0	12.3	26.8	14.9	23.8	14.6	40.4	24.6
Total	100	100	100	100	100	100	100	100
N	**275**	**253**	**2.5**	**134**	**231**	**213**	**235**	**187**

Source: GDFHS 1998 M=Male F=Female

It may be noted that in rural Lahore and urban Bahawalnagar, the proportions of men and women who were Arain were different. In rural Lahore 13.7 percent of men were Arain compared with 23.9 percent of females. The corresponding figures in urban Bahawalnagar were 8.7 and 25.8 percent. The most likely explanation for this sex differential is the concentration of people from different castes in clusters. It is possible that male and female interviewers encountered clusters of different castes.

Even after merging certain subcastes into major castes like Rajputs, it was difficult to merge several other castes. Therefore, castes like Souraj, Boday and Jhatro were placed in the 'Other' category. The 'Other' category accounted for from 12.3 percent of female respondents in urban Lahore to 40.4 percent of male respondents in rural Bahawalnagar. Sometimes people reported subcastes which were rather rare, and interviewers coded them to the 'Other' category. These data suggest considerable caste diversity.

4.5 Occupations of Respondents

Occupation not only has a bearing on people's socio-economic status, but also on their behaviours, including those related to health. For example, hospital staff are more likely to be aware of illness symptoms and health care issues compared with general white-collar workers. Table 4.4 shows that the vast majority of women at all survey sites were housewives. However, in rural Bahawalnagar, nearly 30 percent of women worked on farms or elsewhere. Just over one-third of men from urban Lahore were white-collar workers in public and private organizations. Around one-third of men from all survey sites were self-employed.

Table 4.4 Percent distributions of respondents by occupation, by region, urban-rural residence and gender

	Lahore				Bahawalnagar			
	Urban		Rural		Urban		Rural	
Occupation	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**
Housewife	0	94.3	0	91.5	0	77.8	0	69.9
White-collar workers	34.3	2.4	6.8	0.8	23.2	17.9	9.4	2.7
Self-employed	37.2	0.4	32.7	0	35.5	1.0	33.6	0.5
Skilled workers	21.5	0.8	21.0	0.8	18.0	2.4	13.2	2.2
Unskilled workers	3.3	0	35.1	1.6	21.1	0	40.4	13.7
Other	3.6	2.0	4.4	5.4	2.2	1.0	3.4	10.9
Total	100	100	100	100	100	100	100	100
N	**274**	**245**	**205**	**129**	**228**	**207**	**235**	**183**

Source: GDFHS 1998 M=Male F=Female

Across all survey sites, very few female respondents had paid jobs. However, in urban Bahawalnagar 17.9 percent of women were white-collar workers in the public and private sectors. This proportion seems high, but a government staff-housing cluster in the sample may have pushed it up. Around one-fifth of men in both urban Lahore and urban Bahawalnagar were skilled, while in rural Bahawalnagar the figure was 13.2 percent. In rural Bahawalnagar, 13.7 percent of women and 40.4 percent of men were unskilled workers. Skilled workers included masons, tailors, carpenters, cobblers, ironsmiths and painters, and unskilled workers included construction and farm labourers.

4.6 Family Size

The total fertility rate in Pakistan is high at 5.1 births per woman (UNICEF 1999). Accordingly, average family size in Pakistan is large. Table 4.5 shows percentage distributions of respondents by number of children according to region, urban-rural residence and gender. At most survey sites, around one-third of respondents had 4-5 children, and significant proportions had more. Among five out of the eight groups of respondents, the median number of children was four, and in two of the other three it was five.

Table 4.5 Percent distributions of respondents by number of children, by region, urban-rural residence and gender

	Lahore				Bahawalnagar			
	Urban		Rural		Urban		Rural	
No of children	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**
1	5.5	0.8	5.9	0.8	3.9	6.1	3.9	0.5
2-3	51.5	32.0	36.9	16.8	21.9	30.2	21.0	29.0
4-5	31.4	48.0	29.6	37.4	39.9	36.3	33.0	38.3
6+	11.7	19.2	27.6	45.0	34.2	27.4	42.1	32.2
Total	100	100	100	100	100	100	100	100
Median	3	4	4	5	5	4	4	4
N	**274**	**250**	**203**	**131**	**228**	**212**	**235**	**183**

Source: GDFHS 1998 M=Male F=Female

Female respondents from rural Lahore had larger families (median five children), as 45 percent of them had six or more children. Similarly, more than one-third of male respondents from urban Bahawalnagar had six or more children, and nearly 40 percent had 4-5 children, so the median family size was again five children. The households represented by male respondents from urban Lahore were different from the rest. More than one-half of the male respondents from urban Lahore had only 2-3 children, and only 12 percent had six or more children. Their median of only three children may have been due to their better education profile, as 57 percent of them had college level or higher education.

Education is an important determinant of family size. In urban Lahore, among men aged 35-44 years, 76.9 percent of uneducated and 36.0 percent of educated men had 4+ children ($p<.01$). In urban Bahawalnagar, the corresponding figures were 78.6 percent and 68.9 percent (not statistically significant). Among women aged 35-44 years in urban Lahore, 80.0 percent of uneducated and 69.9 percent of educated women had 4+ children (not statistically significant). The corresponding figures in urban Bahawalnagar were 79.5 percent and 48.9 percent ($p<.01$). Women's education also positively influenced family size but to a lesser degree.

The data show that there is substantial variation in family size among various groups of respondents from urban and rural sites of the two districts. Larger proportions of respondents from rural than urban areas of the two districts had larger numbers of children. This is expected, as agriculture is labour-intensive and people prefer large numbers of children. Secondly, they have conservative social attitudes and tend to believe in divine determination of family size. Finally, contraceptive services are not readily available in rural areas, so that people who want to limit their families do not have access to the required contraceptive services.

4.7 Household Income

Income is a very important determinant of socio-economic status. The availability of money influences many aspects of people's lives, including their health. People are

usually reluctant to report income, and tend to underreport it. Despite doubts concerning the accuracy of the data, income profiles of households nevertheless indicate the relative socio-economic status of populations across the four survey sites. Table 4.6 provides a breakdown of household incomes along with median incomes. The data show that male respondents from urban Lahore reported the highest household income levels (a median of 7000 rupees per month). The urban Lahore households from which women were interviewed were claimed to have a median monthly income of 6500 rupees. A small differential between the incomes reported by males and females suggest that the households represented by men and women are comparable.

Table 4.6 Percent distributions of households by monthly household income, by region, urban-rural residence and gender

	Lahore				Bahawalnagar			
	Urban		Rural		Urban		Rural	
Rupees/month	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**
<3000	11.3	11.5	57.1	41.8	51.1	17.4	77.9	57.8
3000-4999	17.8	18.6	25.9	38.1	25.5	34.7	11.9	24.6
5000-9999	34.5	40.7	15.6	16.4	19.5	33.8	8.9	15.0
10,000+	36.4	29.2	1.5	3.7	3.9	14.1	1.3	2.7
Total	100	100	100	100	100	100	100	100
Median	7000	6500	2500	3000	2800	4000	1800	2200
N	**275**	**253**	**205**	**134**	**231**	**213**	**235**	**187**

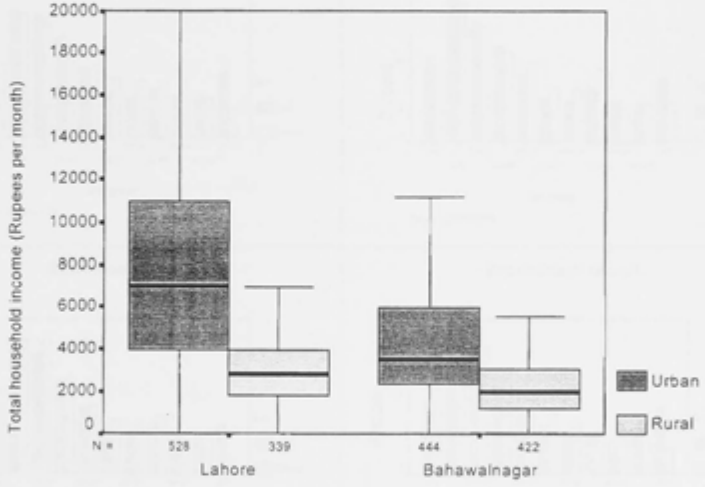
Source: GDFHS 1998 M=Male F=Female

The household income profiles for urban Bahawalnagar showed lower incomes than were reported by urban Lahore respondents. Interestingly, median monthly income reported by female respondents from urban Bahawalnagar was higher than that reported by their male counterparts. This may be due to the contributions of several white-collar workers among female respondents in urban Bahawalnagar. It may be noted that incomes reported from rural areas of the two districts are lower than those reported by their respective urban comparators. This is understandable, because people in rural areas are

generally poor, and many times villagers are paid in kind rather than cash. Such payments are not generally included in incomes.

Figure 4.1 shows quartiles of household monthly income by region and urban-rural residence. It clearly shows that rural Bahawalnagar respondents had the lowest reported incomes and those from urban Lahore had the highest incomes. Inequalities in household income were larger in urban Lahore than at the other three survey sites. In urban Lahore, the range of household incomes extends beyond the highest figure plotted on the vertical axis, because some people reported very high incomes.

Figure 4.1. Quartiles of household monthly income by region and urban-rural residence

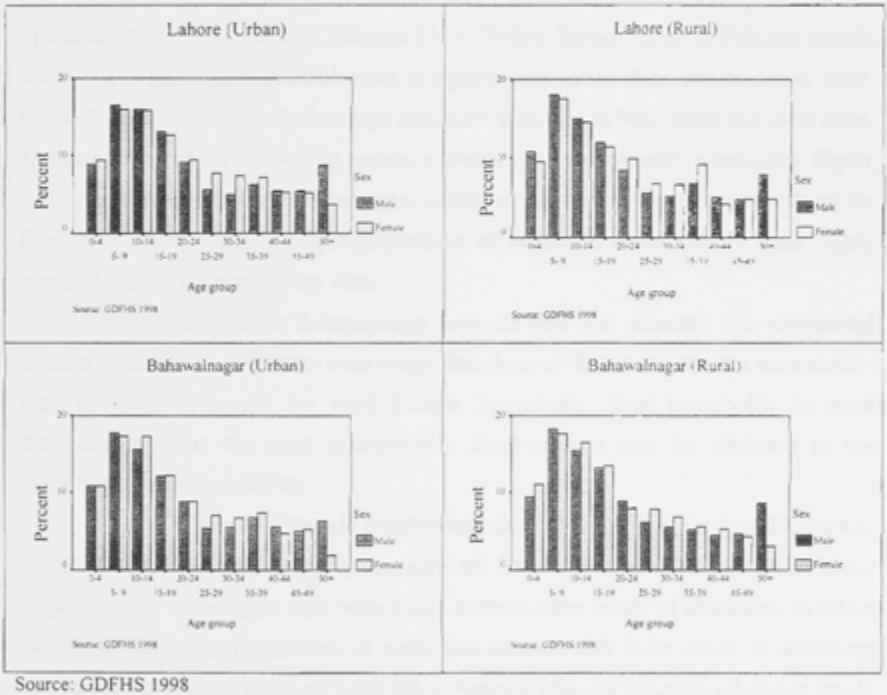


Source: GDFHS 1998

4.8 Age Distributions of Household Populations

Age reporting in Pakistan, as in other developing countries, is marred by inaccuracy. This is generally attributed to high illiteracy, general ignorance about age, and the culturally-based hesitation of some respondents to report accurate ages, particularly of females, young children, and elderly people. The concentration of reported ages at digits ending in zero and five is common in Pakistan (Government of Pakistan 1998c:ii). Figure 4.2 reveals similar age-sex structures at all survey sites.

Figure 4.2 Percentage age distributions by sex for the four survey sites



Source: GDFHS 1998

As in other surveys and censuses in Pakistan, a large proportion of both males and females are found in the younger age groups, i.e. below 15 years. Over two-fifths of members of responding households at three survey sites were aged below 15 years, whilst

about 35 percent of those in urban Lahore were in this category. This may indicate lower fertility in urban Lahore due to higher levels of education (for actual data on age distribution, see Table B1 in Appendix B). Much lower proportions aged 0-4 than 5-9 for all survey sites reflect the requirement that respondents have at least one school-age child to be eligible for interview. Much higher proportions of males than females aged 50+ are attributable to husbands being typically older than their wives.

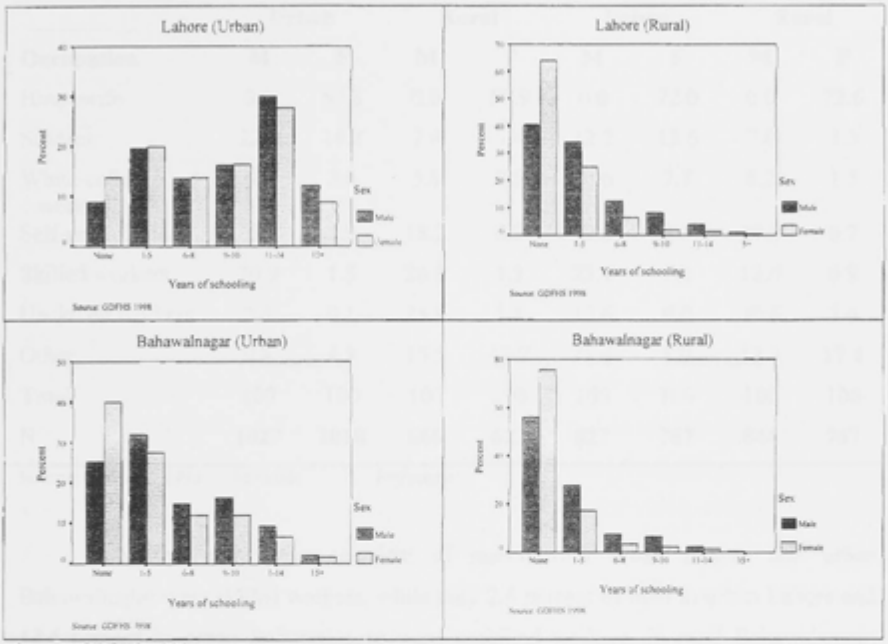
4.9 Educational Attainment of Households

Despite improvement in the literacy ratio from 26.2 percent in 1981 to 45 percent in March 1998 (Government of Pakistan 1981, 1998c), literacy levels in Pakistan remain poor. The literacy ratio in rural areas is significantly lower than that in urban areas. Similarly women are at a disadvantage compared with men in both urban and rural areas. The data collected for this survey present a similar picture of people's educations. Figure 4.3 shows a broad picture of educational attainment by gender for populations from the four survey sites. Clearly, larger proportions of people in urban Lahore were highly educated than at all other survey sites.

Households in urban Bahawalnagar were the next best educated. The educational profiles of the rural survey sites were worse than those of the urban sites, but were similar with a small advantage for rural Lahore households. That households in rural Bahawalnagar were the most educationally disadvantaged may be attributed to the pervasive poverty in that area.

A uniform pattern of female disadvantage in education is evident from Figure 4.3. At all four survey sites, larger proportions of females had no education, and lower proportions of women than men were found at most other levels of education. In urban Lahore, however, the proportions of males and females with lower levels of schooling were similar (for actual data, see Table B2 in Appendix B). As expected, education levels were lower in rural areas than in urban areas of the respective districts, and rural Bahawalnagar portrayed the poorest educational profile among the four urban and rural survey sites.

Figures 4.3 Educational distributions of persons aged 5 years and over by sex for the four survey sites



Source: GDFHS 1998

4.10 Occupations of People

Table 4.7 provides occupational profiles of household members aged 15 years and over by urban-rural residence and gender. The data show that more than one-fifth of males in urban Lahore were pursuing college-level studies, compared with 12.7 percent in urban Bahawalnagar. The corresponding data from rural areas of the two districts show similar, but lower, proportions of male respondents pursuing higher level studies. A quite uniform proportion of males from all survey sites were self-employed: 23.4 percent in urban Lahore, 18.2 percent in rural Lahore, 19.5 percent in urban Bahawalnagar, and 19.0 percent in rural Bahawalnagar.

Table 4.7 Occupations of household populations aged 15 or older by region, urban-rural residence and gender

	Lahore				Bahawalnagar			
	Urban		Rural		Urban		Rural	
Occupation	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**
Housewife	0.0	67.8	0.0	80.9	0.0	72.0	0.0	72.6
Student	22.1	19.8	7.9	3.4	12.7	13.6	7.0	3.3
White-collar workers	21.1	3.0	5.8	0.5	20.6	7.7	8.2	1.5
Self-employed	23.4	2.9	18.2	0.2	19.5	0.4	19.0	0.7
Skilled workers	20.9	1.5	26.8	1.3	23.1	1.4	12.0	0.9
Unskilled workers	2.6	0.1	25.9	1.1	12.6	0.0	40.6	3.6
Other	9.8	4.8	15.5	12.7	11.6	5.0	13.3	17.4
Total	100	100	100	100	100	100	100	100
N	**1027**	**1018**	**660**	**623**	**827**	**767**	**844**	**747**

Source: GDFHS 1998 M=Male F=Female

Similarly, more than one-fifth of males from urban Lahore and urban Bahawalnagar were skilled workers, while only 2.6 percent of men in urban Lahore and 12.6 percent in urban Bahawalnagar were unskilled workers. In rural Bahawalnagar, however, 40.6 percent of men were unskilled workers. As anticipated, there were large variations between urban and rural areas in the proportions of males who were white-collar workers. More than one-fifth of males from urban Lahore and urban Bahawalnagar were white-collar workers, compared with only 5.8 percent in rural Lahore and 8.2 percent in rural Bahawalnagar.

Gender differentials in occupational profiles are pronounced. The vast majority of women from all survey sites were housewives. Among women aged 15 years and over, 14.4 percent in urban Bahawalnagar, 12.4 percent in urban Lahore, and 15.7 percent in rural Lahore were employed. In rural Bahawalnagar, nearly one-fourth of females were employed. The higher rate of employment among women in rural Bahawalnagar may be attributed to widespread poverty, intensive agriculture, and a relatively more secure environment than in a mega-city such as Lahore.

In urban Bahawalnagar, 7.7 percent of women had white-collar jobs and five percent were in 'other' occupations like crafts and agriculture. The corresponding figures for women in urban Lahore were 3.0 percent and 4.8 percent respectively. Negligible numbers of women were self-employed or skilled workers at all survey sites. These data show clear occupational and employment disadvantage for females. Promotion of employment among women is desirable for their emancipation, but in the context of poverty, employment for some women may have adverse consequences for their health because their employment becomes a dual burden. They normally have to look after their households in the usual way in addition to meeting their job requirements.

4.11 Individual Earnings

Income plays an important role in obtaining resources and services that promote and/or produce health. Although family is a strong social institution in Pakistan and provides for various needs of its members, personal paid employment of women provides autonomy and psycho-social confidence. Table 4.8 shows individual incomes of males and females who were non-students, and aged 15 years and over, by region and urban-rural residence. Incomes are given in rupees per month (at the time of the survey, an American dollar bought nearly 45 Pakistani rupees). In urban Lahore, 19.5 percent of men earned 3001-5000 rupees per month, 23.9 percent earned 5001-10,000 rupees per month, and 12.4 percent earned over 10,000 rupees per month.

Male income levels at the other three survey sites were lower than in urban Lahore. In urban Bahawalnagar, 26.5 percent of men earned Rs1001-2000 per month, compared with 6.1 percent in urban Lahore. In rural Bahawalnagar, male income levels were lowest of all. Among rural Bahawalnagar men aged 15 years and over, 24.5 percent earned up to Rs. 1000 per month, 31.6 percent had a monthly income of Rs. 1001-2000, and only 14.5 percent earned more than 2000 rupees per month.

Table 4.8 Incomes of non-students aged 15 years and over by region, urban-rural residence and gender

	Lahore				Bahawalnagar			
	Urban		Rural		Urban		Rural	
Rupees/month	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**
None	23.8	96.1	19.6	95.6	22.2	86.1	29.5	92.5
Up to 1000	3.9	0.2	13.1	2.9	11.0	2.4	24.5	3.4
1001-2000	6.1	0.6	43.4	1.5	26.5	2.2	31.6	1.6
2001-3000	10.4	0.5	15.5	0.0	19.2	2.2	8.2	1.6
3001-5000	19.5	1.2	5.9	0.0	13.8	5.4	4.2	0.5
5001-10000	23.9	0.9	2.2	0.0	5.6	1.6	1.9	0.3
10001-20000	10.3	0.4	0.3	0.0	1.2	0.0	0.2	0.0
20000+	2.1	0.1	0.0	0.0	0.4	0.0	0.0	0.0
Total	100	100	100	100	100	100	100	100
Median	5000	4500	2000	800	2400	3200	1500	1200
N	**824**	**819**	**627**	**612**	**744**	**671**	**808**	**732**

Source: GDFHS 1998 M=Male F=Female

4.12 Marital Status

Marital statuses of males and females aged 15 years and over by region and urban-rural residence are given in Table 4.9. Consistently, across all survey sites, larger proportions of men than of women were never-married, reflecting earlier marriages of women than of men. Just over two-fifths (41.6 percent) of men in urban Lahore and 37.9 percent of men in urban Bahawalnagar were never married. The corresponding figures for rural sites of the two districts were 39.3 percent and 34.5 percent respectively. These data show that over all survey sites, around 7-9 percent more men than women were never married, a finding consistent with their older ages at marriage. The numbers of divorcees and widows were negligible at all survey sites.

Table 4.9 Marital statuses of household populations aged 15 years and over by region, urban-rural residence and gender

	Lahore				Bahawalnagar			
	Urban		Rural		Urban		Rural	
Marital status	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**
Never married	41.6	32.7	39.3	31.0	37.9	31.1	34.5	25.2
Currently married	58.1	66.7	60.5	68.2	62.0	68.7	65.4	74.8
Divorced/widowed	0.3	0.6	0.2	0.8	0.1	0.1	0.1	0.0
Total	100	100	100	100	100	100	100	100
N	**1051**	**1021**	**659**	**977**	**620**	**849**	**771**	**862**

Source: GDFHS 1998 M=Male F=Female

4.13 Housing

Table 4.10 shows percent distributions of households by type of construction material of houses, by region, urban-rural residence and gender of respondent. The *Pucca* (cement and brick) and *Kutcha* (mud and unbaked brick) types of houses create different disease environments, and also indicate the socio-economic status of residents. *Kutcha* houses are normally found in rural areas, and few houses are built with mud and unbaked bricks in cities. Nearly all houses in urban Lahore were *Pucca*, and in urban Bahawalnagar less than ten percent of the houses were *Kutcha*. In rural Bahawalnagar, however, 56.1 percent of houses were *Kutcha*. This is mostly because of pervasive poverty and continuing traditional attitudes. *Kutcha* houses are considered cool and functional during the long hot summers in Pakistan. People prefer cool *Kutcha* houses because poverty prevents them from buying expensive air-conditioning equipment. In rural Lahore, 45.5 percent of female respondents had *Kutcha* houses while 31.7 percent of men from rural Lahore reported *Kutcha* houses. This sex differential may have emerged because of the different parts of the rural Lahore field site allocated to male and female interviewers. Secondly, female interviewing was stopped early in rural Lahore, and this could have contributed to differential proportions of *Kutcha* houses being advised by male and female respondents. The comparative prevalence of *Kutcha* and *Pucca* houses

in rural areas of the two districts indicates the differential socio-economic status of the two populations, that of rural Bahawalnagar being poorer.

Table 4.10 Percent distributions of households by type of construction material of houses, by region, urban-rural residence and gender of respondent

	Lahore				Bahawalnagar			
	Urban		Rural		Urban		Rural	
Construction material	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**
Brick and cement (*Pucca*)	96.3	99.2	68.3	54.5	90.9	91.1	42.3	43.9
Mud/unbaked bricks (*Kutcha*)	3.7	0.8	31.7	45.5	9.1	8.9	57.7	56.1
Total	100	100	100	100	100	100	100	100
N	**271**	**253**	**205**	**134**	**230**	**213**	**234**	**187**

Source: GDFHS 1998 M=Male F=Female

4.14 Type of Toilet

Toilet facilities affect people's health through their role in personal cleanliness and sanitation. In urban areas, flush toilets are common and the data (Table 4.11) show that nearly all houses in urban Lahore had flush toilet facilities. Similarly, the vast majority of urban respondents in Bahawalnagar had flush toilets. In urban Bahawalnagar, about 12 percent of men and only 1.5 percent of women reported using a bucket. The male-female differential in bucket use in rural Lahore was also substantial, i.e. 23.4 percent compared to 10.0 percent. Because substantial proportions of men were interviewed on farms and at workplaces, they may have responded with reference to the facility on the farm or at work, rather than at their homes. Understandably, however, substantially lower proportions of houses in rural than in urban areas of the two districts had flush toilets.

It is interesting to note that greater proportions of female than male respondents in rural areas of both districts reported having flush toilets. This may be due to the fact that most interviews of women were conducted in respondents' homes by female interviewers, and the interviewers could see themselves what facilities were present. In rural Bahawalnagar, more than two-thirds of both male and female respondents had no toilet, and used fields for defecating.

Table 4.11 Percent distributions of households by type of toilet, by region, urban-rural residence and gender

	Lahore				Bahawalnagar			
	Urban		Rural		Urban		Rural	
Type of toilet	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**
Flush	96.3	99.6	25.9	46.9	81.7	90.8	14.5	33.2
Bucket	0.4	0.4	23.4	10.0	11.8	1.5	7.9	6.0
Pit	0.0	0.0	12.2	17.7	3.9	0.5	5.3	0.5
Other/No facility	3.3	0.0	38.5	25.4	2.6	7.3	72.2	60.3
Total	100	100	100	100	100	100	100	100
N	**270**	**253**	**205**	**130**	**229**	**206**	**234**	**184**

Source: GDFHS 1998 M=Male F=Female

4.15 Electricity Connection

Provision of electricity is a basic amenity nowadays, and helps in improving the productivity of people in rural areas. Whether electricity was connected used to be an important differentiating characteristic of households. In the past two decades, however, more and more households in cities and villages have been provided with electricity. The Government of Pakistan has focused on providing electricity to villages all over Pakistan, and good progress has been made in recent years. In 1991-92, 40,784 villages were electrified. The number had increased to 67,351 in 1999-2000, a rise of 65 percent in about a decade (Government of Pakistan 2000:180). It is mostly only remote villages that now remain without this important utility.

According to the 1996-97 PFFPS, 97.9 percent of urban and 68.6 percent of rural households were connected with electricity (Hakim et al. 1998). The data presented in Table 4.12 show a similar profile of electricity provision between urban and rural areas. The vast majority of households across all survey sites had electricity. However, about one-quarter of households in rural Bahawalnagar did not have power connected. This again indicates the relatively poor socio-economic status of rural respondents in that district.

Table 4.12 Percent distributions of households with and without electricity by region, urban-rural residence and gender

	Lahore				Bahawalnagar			
	Urban		Rural		Urban		Rural	
Power connection	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**
Yes	98.2	99.2	87.8	88.1	95.2	98.1	68.5	74.9
No	1.8	0.8	12.2	11.9	4.8	1.9	31.5	25.1
Total	100	100	100	100	100	100	100	100
N	**275**	**253**	**205**	**134**	**231**	**213**	**235**	**187**

Source: GDFHS 1998 M=Male F=Female

4.16 Source of Water

The source of water available to people may have had an important bearing on their health. Table 4.13 presents data on water sources used for washing and drinking. The comparative profiles suggest that sources used for washing and drinking were similar. Around two-thirds of both male and female respondents from urban Lahore had water piped into their residences, while most of the rest of them used public taps for their water needs. In urban Bahawalnagar, 73.2 percent of female respondents reported having water piped into their residences while only 3.9 percent of male respondents reported that they had water piped into their homes.

The existence of water source differentials between males and females is possible, as different blocks of houses (neighbourhoods) were allocated to male and female interviewers. However, the differentials are too large to be explained only by clustering of access to this facility. Water supply is a public utility for which one pays, and owing to rampant corruption a substantial number of water connections could be illegal. Hence male respondents could have been reluctant to report water connections. The other plausible explanation is that some male respondents may have replied with respect to the type of water source available at work. This suggestion receives support from the data, which show that 87.4 percent of male respondents from urban Bahawalnagar reported using a public tap for washing. It is possible that 'piped into residence' and 'public tap' may have been confused, because both sources are provided by the government. Female

interviewers, on the other hand, generally conducted interviews at respondents' homes, where they could see water pipes coming into houses.

Hand pumps were used extensively in rural areas of the two districts. About 90 percent of male and 44 percent of female respondents in rural Lahore reported the use of a hand pump for their water needs. This male-female differential in the reported water source can be explained by the same argument as was presented above.

Table 4.13 Percent distributions of households by types of water sources used for washing and drinking, by region, urban-rural residence and gender of respondents

	Lahore				Bahawalnagar			
Water source	**Urban**		**Rural**		**Urban**		**Rural**	
For washing	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**
Piped into house	64.4	73.5	2.9	22.7	3.9	73.2	6.0	18.8
Public tap	31.3	26.1	4.9	1.5	87.4	22.1	28.5	17.2
Hand pump	2.9	0.4	89.7	43.9	7.4	3.3	35.3	36.0
Other	1.5	0.0	2.5	31.8	1.3	1.4	30.0	28.0
Total	100	100	100	100	100	100	100	100
N	**275**	**253**	**204**	**132**	**231**	**213**	**235**	**186**
For drinking								
Piped into house	63.6	71.5	2.9	23.5	3.9	72.6	6.0	17.1
Public tap	31.3	28.1	4.4	1.5	88.3	22.6	29.4	18.2
Hand pump	2.9	0.0	89.3	43.9	6.5	3.3	37.0	36.9
Other	2.2	0.4	3.4	31.1	1.3	1.4	27.7	27.8
Total	100	100	100	100	100	100	100	100
N	**275**	**253**	**204**	**132**	**231**	**213**	**235**	**186**

Source: GDFHS 1998 M=Male F=Female

The 'Other' category includes sources such as wells, rivers, canals, *karez* (natural water channels) and surface water. A little less than one-third of rural women from both the districts and of men from rural Bahawalnagar reported using 'Other' sources water. Most villagers in rural Lahore used tube-wells for their water needs, while in rural

Bahawalnagar, dug-wells, canals, and rivers were among the sources of water used for both washing and drinking needs.

4.17 Availability of Durable Goods

The availability of various durable goods is used to index the socio-economic status of households in many developing societies. Table 4.14 shows that larger proportions of both male and female respondents from urban Lahore than from other survey sites reported the possession of specific durable goods. This is expected, because urban Lahore respondents were the most prosperous of the four populations in the survey.

Table 4.14 Percentages of households possessing specified durable goods by region, urban-rural residence and gender of respondent

	Lahore				Bahawalnagar			
	Urban		Rural		Urban		Rural	
Durable goods type	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**
Water pump	56.6	46.6	40.1	25.4	38.8	56.7	19.9	9.6
Washing machine	91.6	98.0	5.4	19.4	40.3	62.9	3.4	10.2
Room cooler	59.3	77.1	2.0	13.4	14.3	48.6	2.1	5.9
Radio	61.8	89.7	16.0	25.4	30.1	66.7	7.7	28.3
Television	87.3	98.0	17.6	30.1	64.5	81.7	17.4	35.3
Refrigerator	84.0	95.3	3.9	13.4	17.4	48.8	2.1	5.9
Sui (natural) gas	92.7	99.2	0.5	12.7	3.1	2.4	2.1	2.1
Gas cylinder	5.1	14.2	0.5	4.5	12.6	37.6	2.6	3.2
Bicycle	37.4	48.4	35.6	40.2	70.1	64.4	54.1	63.1
Motorcycle	53.3	56.2	3.9	9.8	14.8	36.6	5.2	9.1
Car/Van/Tractor	31.9	24.2	2.5	5.3	3.1	7.8	1.7	2.1
N	**275**	**253**	**205**	**134**	**231**	**213**	**235**	**187**

Source: GDFHS 1998 M=Male F=Female

Urban Bahawalnagar comes next in the ranking, with lower proportions of respondents than in urban Lahore, but greater proportions than in both rural survey sites, reporting possession of various durable goods. Rural areas of the two districts were

generally similar, but larger proportions of Lahore than Bahawalnagar rural households had washing machines and water pumps.

It may be noted, however, that less than eight percent of both male and female respondents from all survey sites outside urban Lahore reported having the most expensive item, a car, van, or tractor. In urban Lahore, one-third of male and one-quarter of female respondents reported owning a four-wheeler. This shows the relatively high socio-economic status of urban Lahore respondents compared to counterparts at other survey sites.

4.18 Exposure to Mass Media

Exposure to mass media plays a role in shaping health-related behaviours of respondents and their families. It potentially provides awareness about the availability of various health services and broadens people's vision about various aspects of health and health promotion.

4.18.1 Reading Newspapers

Table 4.15 provides a newspaper/magazine reading profile of those male and female respondents who had the ability to read. The data show that 57.4 percent of men and 47.2 percent of women in urban Lahore reported regular reading of newspapers or magazines. 'Regular' means one or more times each week. It may be noted that the proportions of regular readers among men and women are similar. When a household buys a newspaper or a magazine, the family tries to get the most out of the purchase, and it is not surprising that similar proportions of men and women browsed through print media.

Substantial proportions of both men and women were occasional readers. Because of poverty, many people cannot afford to buy newspapers or magazines, and they wait for a chance to get hold of reading material. This is especially true for rural respondents. More than one-half of men in rural Bahawalnagar were occasional readers, compared with only 15 percent of their female counterparts, most of whom never read. Men get many chances to travel to cities and sift through papers, while women stay at home and seldom get hold of either newspapers or magazines.

Table 4.15 Percent distributions of respondents with reading ability by frequency of reading newspapers/magazines, by region, urban-rural residence and gender

	Lahore				Bahawalnagar			
	Urban		Rural		Urban		Rural	
	M	F	M	F	M	F	M	F
Frequency of reading newspapers								
Regularly	57.4	47.2	24.6	26.5	33.8	35.5	16.4	10.4
Occasionally	33.6	32.5	27.2	26.5	46.6	27.7	52.1	14.6
Not at all	9.0	20.3	48.2	46.9	19.6	36.9	31.5	75.0
Total	100	100	100	100	100	100	100	100
N	**244**	**231**	**114**	**49**	**148**	**141**	**73**	**48**

Source: GDFHS 1998 M=Male F=Female

4.18.2 Radio Listening

Radio used to be an important electronic source of information, but is not relied on as much now. Radios can be used with battery cells, and rural inhabitants, in the absence of electricity, used them a lot. However, with increasing access to electricity, coupled with widening geographic coverage by television transmission, more and more people use television rather than radio for their information and entertainment needs.

Table 4.16 shows percent distributions of respondents reporting frequency of listening to radio by urban-rural residence and gender. Listening to radio three or more times a week was defined as 'regular' listening. In urban Lahore, 42.9 percent of male and 58.1 percent of female respondents reported never listening to radio. Similar proportions of male and female respondents in urban Bahawalnagar did not listen to radio either. In rural areas of the two districts, three quarters or more of male and female respondents did not listen to radio. Low reported frequencies of listening to radio may be attributed to licensing requirements for possessing radios. Many people are likely not to have paid for radio licences, which may have influenced responses.

Table 4.16 Percent distributions of respondents by frequency of listening to radio, by region, urban-rural residence and gender

	Lahore				Bahawalnagar			
	Urban		Rural		Urban		Rural	
	M	F	M	F	M	F	M	F
Frequency of listening to radio								
Regularly	25.8	23.7	13.2	11.2	21.2	21.2	9.0	3.7
Occasionally	31.3	18.2	13.7	11.2	32.9	25.9	7.7	10.2
Not at all	42.9	58.1	73.2	77.6	45.9	52.8	83.3	86.1
Total	100	100	100	100	100	100	100	100
N	**275**	**253**	**205**	**134**	**231**	**212**	**234**	**187**

Source: GDFHS 1998 M=Male F=Female

4.18.3 Television Watching

Television is probably the most important single medium of information and entertainment in both urban and rural areas. Because of its audio-visual character, it is the most influential medium in predominantly illiterate societies like Pakistan. In Pakistan 56.5 percent of males and 32.6 percent of females aged 10 years and above are literate (Pakistan Census 1998). In a low-literacy social environment, television plays a vital role, especially in rural areas where literacy is even lower. In rural Pakistan, 47.4 percent of males and only 20.8 percent of females aged 10 years and above are literate. Television, being an audio-visual medium, is a potentially a critically important source of information in rural areas, especially for females. Although, most women in rural areas do not watch television, the medium is gaining popularity and can play a significant role in women's development.

Table 4.17 shows that the vast majority of respondents in urban Lahore watched television. Nearly four-fifths of females and nearly two-thirds of male respondents in urban Lahore watched television regularly. The greater proportion of male occasional television watchers in urban Lahore may reflect men's work schedules. Surprisingly, about three-fourths of female and four-fifths of male respondents in rural Lahore reported not watching television at all. Similar proportions of respondents reported not having

television sets, but people sometimes do watch television with friends and neighbours. Among women, 6.7 percent in rural Lahore and 17.6 percent in rural Bahawalnagar were occasional watchers, this difference largely being offset by a higher proportion in rural Lahore who did not watch television at all. Villages in rural Bahawalnagar were small, and women in the larger village in rural Lahore may have been less likely to do so.

Table 4.17 Percent distributions of respondents by frequency of watching television, by region, urban-rural residence and gender

	Lahore				Bahawalnagar			
	Urban		Rural		Urban		Rural	
	M	F	M	F	M	F	M	F
Frequency of TV watching								
Regularly	63.3	79.1	9.3	19.4	50.6	63.4	14.5	16.6
Occasionally	21.5	12.6	9.3	6.7	22.9	12.2	3.4	17.6
Not at all	15.3	8.3	81.5	73.9	26.4	24.4	82.1	65.8
Total	100	100	100	100	100	100	100	100
N	**275**	**253**	**205**	**134**	**231**	**213**	**234**	**187**

Source: GDFHS 1998 M=Male F=Female

4.19 Summary

In summary, households in urban Lahore had the highest socio-economic status compared with the other three survey sites. The profiles of households with respect to education, income, occupation, and possession of durable goods indicate the advantageous position of respondents and households in urban Lahore. Bahawalnagar urban households ranked next. Rural households of the two districts are hard to compare with urban households owing to sharp urban-rural structural distinctions in terms of education, occupation, and tradition. However, households in rural Lahore had a socio-economic edge over households in rural Bahawalnagar.

Chapter 5
Gender Differences

5.1 Introduction

In most societies, males and females differ in several traits, such as cognitive skills, basic personality, self-esteem, occupational preferences, aspirations and ambitions in life, social roles, and modes of emotional expression. In developing countries, these differences are believed to be the result of biological differences between men and women. Most of these male-female divergences are, however, products of social processes operating in local social and gender systems. Because the nature of social processes varies across societies, gender differentials also vary across communities and societies (Oakley 1972, Hess and Myra 1987, Chafetz 1999, Gragin and Simonds 1999, Albrecht et al. 2000).

By nature, there are not many differences between males and females. Inter-sex diversities are constructed by human social systems, largely on the premise of the different reproductive functions of men and women. Although these reproductive functions are the same across societies and have remained the same over history, social differentials between men and women have varied substantially. Allocations of occupations to sexes have been a social decision and women, in most societies, are generally occupied with housekeeping while men work in the public domain. Such social variations between males and females have been exaggerated by social production of gender roles (Gragin and Simonds 1999, Stockard 1999).

To make a segregated occupational structure functional, many other means are adopted to differentiate between males and females. For example, male and female dress codes and ways of highlighting the figures of men and women vary substantially across societies. These distinctions between men and women are direct products of gender systems. Gender differences between males and females were not sharp in early hunting and gathering societies, because men and women were occupied in similar tasks primarily aimed at survival. However, the development of agriculture brought a growing complexity of social roles, and an increasing number of differences between the genders was created.

Owing to women's childbearing role, and probably also to their smaller average body mass, they became dominated by physically stronger men in almost all societies around the globe. This process of domination, called 'engenderment', continued for so long and became so pervasive that men's domination of women turned into a social norm. Through continuing engenderment, male-female differences are created and perpetuated in most societies around the world. The ramifications of this engenderment process, especially for females, are the subject of this chapter. While there are some benefits for women, the net effect of engenderment on females is negative. This chapter examines women's social disadvantage in the context of regional and urban-rural social systems in the two districts of Punjab province in which fieldwork was conducted.

Gender differences may be measured by several indicators. However, this chapter will examine son preference, education levels of males and females, gender-based concerns about sons and daughters, marriage patterns, women's autonomy as indexed by involvement in household decision making and freedom of mobility, physical security, and religiosity.

5.2 Son Preference

It is well known that in South Asia, sons are preferred to daughters by parents and societies (Khan and Sirageldin 1977, Rajaraman and Bambawale 1980, Rukanuddin 1982, Sathar 1987, Mahmood 1996). The literature highlights several reasons for people preferring sons to daughters. They include sons' provision of economic security to parents, their looking after elderly parents, their provision of lineage to the family, daughters' movement away from their parents after marriage, and their taking economic resources away from their families through dowries. Whatever the reason, son preference results in lower female than male social status, which has serious implications for the health and welfare of females (Hussain and Glass 1988, Manzoor 1993, Hill and Upchurch 1995).

Table 5.1 shows percentages of currently married non-pregnant women aged 15-49 years who wanted another child, by number and sex of living children, in 1990-91. The analysis is based on Pakistan Demographic and Health Survey data and clearly shows that Pakistanis prefer sons to daughters. For example, among mothers of three children,

79 percent of those having no son desired another child compared to 28 percent of those who had two and 33 percent of those who had three sons. Similarly, among mothers of 5 or more children, 15 percent having fewer sons than daughters wanted another child compared with only two percent of those who had equal numbers of sons and daughters and 7 percent of those who had more sons. In general, having sons leads to a lower completed family size than having daughters, because people keep on producing children until they have some sons (Cleland et al. 1983, Murthi et al. 1995, Arnold 1997, Winkvist and Akhtar 2000).

Table 5.1 Percentage of currently married non-pregnant women aged 15-49 years who want another child, by number and sex of living children, 1990-91

	Number of children							
	None	1	2	3	4	5+		
Number of sons						Sons< daughters	Sons= daughters	Sons> daughters
No sons	89	88	77	79	(72)			
1 son		88	60	56	43			
2 sons			61	28	18			
3 sons				33	17			
4 sons					(31)			
5+ children						15	2	7

Source: Arnold 1997
Note: Parentheses show that the percentages are based on 25-49 unweighted cases

Table 5.2 shows percent distributions of respondents by desired sex of first child, by region, urban-rural residence, and respondent's gender. A retrospective question was asked to ascertain what sex respondents had wished for before the birth of their first child. The data show that substantial proportions of respondents from all survey sites had preferred their first child to be male. However, there are variations across the four survey sites and between men and women. In general, larger proportions of women than men, but a larger proportion of men than women in urban Lahore, preferred a son to a daughter. However, the former gender differential was statistically significant in only one survey

site. In rural Lahore, 69.9 percent of women compared to 45.8 percent of men reported a desire for a male first child ($p<.001$).

Local socio-cultural conditions influence the attitudes of both men and women, but women are probably more affected than men. In rural Lahore, a sort of peri-urban locality, women had experienced destabilization of gender structures due to the availability of work in neighbouring vegetable packing factories. In line with socially entrenched patriarchal attitudes, rural men did not approve of women's work in factories. Some women workers had been attacked on their way to or from factories. In a focus group discussion with local men, one participant said: "I consider earnings of women morally wrong". Another participant said: "The girls who work in those factories are viewed as 'loose characters' by their male colleagues. Some of them chase these girls to their homes". Apparently, men did not like changing gender roles and had hostile attitudes towards village women, in general, and working women in particular. Through their hostile attitudes they probably were sending a message to potential workers among women. Such patriarchal attitudes are expected and likely to influence the social and health status of females (Agarwal 1988, Moghadam 1992, Akhtar 1996, Hassan 1999a). In such insecure social circumstances, women felt insecure and uneasy, and this probably influenced them to respond more often in accordance with cultural tradition.

Table 5.2 Percent distributions of respondents by desired sex of the first child, by region, urban-rural residence and gender

	Lahore				Bahawalnagar			
	Urban		Rural		Urban		Rural	
				***				
Desired sex	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**
Male	40.8	31.7	45.8	69.9	52.9	55.9	60.5	65.4
Female	5.5	4.4	4.9	3.8	3.1	1.4	2.6	1.6
Either sex	53.7	63.9	49.3	26.3	44.0	42.7	36.9	33.0
Total	100	100	100	100	100	100	100	100
N	**272**	**252**	**203**	**133**	**225**	**213**	**233**	**185**

Source: GDFHS 1998 M=Male F=Female * p<.05 ** p<.01 *** p<.001

In a women's focus group discussion in rural Lahore, one participant said: "I am scared of the possibility of my daughters getting imperfect reputations when they go out in public". Another woman interjected: "I am fearful of the blemished repute of my daughters". One of the participants who was herself a factory worker said: "People think that we love to work in factories. They do not understand that we work because of poverty". These social conditions are rather severe and different from those witnessed at other survey sites. Therefore, it seems logical that women in rural Lahore expressed strong son preference. In rural Bahawalnagar, more than three-fifths of men desired a son for their first child compared to less than one-half in rural Lahore ($p<.01$).

The urban-rural differentials among women are substantial in Lahore but minor among men and women at the other three survey sites. Among women, 31.7 percent in urban and 69.9 percent in rural Lahore had wanted a son first ($p<.001$). In Bahawalnagar, 55.9 percent of urban and 65.4 percent of rural women had wished for a male child first, although the differential was not statistically significant. The corresponding figures for males were 40.8 and 45.8 percent in Lahore, and 52.9 and 60.5 percent in Bahawalnagar. Neither of these urban-rural differentials is statistically significant.

The male-female differentials indicate that women were more traditional in their attitudes than their male counterparts (Fruzzetti 1980, Lindsey 1994, Moghadam 1996, Stockard 1999). Tradition among women is encouraged because of their child socialization role. Patriarchy promotes and perpetuates male domination through inculcation of traditionalism among children, especially female children.

It will be noted that large proportions of both male and female respondents claimed no preference as to the sex of their first child. The proportions ranged from 26.3 percent among women in rural Lahore to 63.9 percent among women in urban Lahore. Right after marriage, most people simply want a child. Son preference for the first child is important, but people are not too sensitive at this early stage of family formation. People are interested in ensuring the fertility of both husband and wife, and the level of sensitivity to sex preference depends upon individual couples. Some couples may be very sensitive to the sex of their first child, and some others not. One woman participant in a focus group discussion in urban Lahore said that her in-laws criticized her for bearing a female child first. According to her: "My in-laws said that we never had a girl as a first child in our family". On the other hand, another woman participant said: "I had a child

after seven years of marriage, and any sex was welcomed". Yet another woman participant said: "All elders say that the first birth may be of either sex". Another participant said: "I had a girl child first, and the second time, I wanted a boy". Therefore, it is safe to argue that many people are not too concerned about the sex of their first child, but that they do become sensitive after the birth of a female first child.

Table 5.3 Percent distributions of respondents by desired sex of the first child, by region, urban-rural residence, gender and sex of first child

	Lahore				Bahawalnagar			
	Urban		Rural		Urban		Rural	
Desired sex	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**
				First child male				
Male	41.8	30.2	45.5	68.0	53.2	50.0	61.4	62.1
Female	4.3	6.3	5.0	2.7	1.8	0.9	3.0	3.4
Either sex	53.9	63.5	49.6	29.3	45.0	49.1	36.6	34.5
Total	100	100	100	100	100	100	100	100
N	**141**	**126**	**121**	**75**	**109**	**116**	**132**	**87**
				First child female				
Desired sex	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**
Male	39.2	34.1	45.0	74.5	53.1	62.5	59.6	68.1
Female	6.9	1.6	5.0	5.5	4.4	2.1	2.0	0.0
Either sex	53.8	64.2	50.0	20.0	42.5	35.4	38.4	31.9
Total	100	100	100	100	100	100	100	100
N	**130**	**123**	**80**	**55**	**113**	**96**	**99**	**94**

Source: GDFHS 1998 M=Male F=Female * p<.05 ** p<.01 *** p<.001

The above data and discussion were based on a retrospective question about the desired sex of the first child. It may be argued that people might have rationalized their actual experience. To look into this, Table 5.2 was split into two panels showing the preferences of respondents who had a male child first and of those who had a female child first (Table 5.3). Inspection of Table 5.3 shows that in most columns sex preferences of respondents having male and female first children were not much different from each

other. Differences between distributions by desired sex for those with male and female first children were not statistically significant for all survey sites. Therefore, it can be concluded that there is little evidence of respondents having rationalized their own experience in stating their preferences.

The data discussed above dealt with first parity. Table 5.4 shows percentage distributions of respondents showing desire for more children, and desired sex of the next child, if more wanted, by region, urban-rural residence and gender. The data show that large proportions of respondents did not want any more children. Either they had achieved their desired family size or they had exceeded it.

Table 5.4 Percent distributions of respondents showing desire for another child and desired sex of the next child, if one wanted, by region, urban-rural residence and gender

	Lahore				Bahawalnagar			
	Urban		Rural		Urban		Rural	
	**		**		*		**	
Desired/preference	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**
	Desire for more children							
Another child wanted	64.7	17.1	50.2	43.2	91.3	54.9	87.7	57.5
No more children wanted	35.3	82.9	49.8	56.8	8.7	45.1	12.3	42.5
Total	100	100	100	100	100	100	100	100
N	**275**	**252**	**205**	**132**	**230**	**213**	**235**	**186**
	Sex preference for next child, if more wanted							
Male	42.7	39.5	48.5	70.2	42.9	42.7	52.4	54.2
Female	17.4	14.0	12.6	8.8	4.3	17.1	5.3	10.3
Either sex	39.9	46.5	38.8	21.1	52.9	40.2	42.2	35.5
Total	100	100	100	100	100	100	100	100
N	**178**	**43**	**103**	**57**	**210**	**117**	**206**	**107**

Source: GDFHS 1998 M=Male F=Female * p<.05 ** p<.01 *** p<.001

Among those who wanted another child, the pattern of sex preference changed. The proportions of respondents who wanted sons for their next children are similar to those in Table 5.2, but among most groups of respondents the proportions who definitely wanted a female next child were significantly greater than the proportions who had

desired a female first child. For example, among men in urban Lahore, 5.5 percent wanted a female first child (Table 5.2) and this proportion increased to 17.4 percent for the next child (Table 5.4) ($p<.05$). The corresponding figures for women in urban Lahore were 4.4 percent and 14.4 percent ($p<.05$). This suggests that although son preference is deeply rooted in socio-cultural systems, it is not absolute, and at higher parities preferences are substantially influenced by the gender composition of prior children.

Table 5.5 presents data on respondents who reported a preference that their first child be a son, showing the first reason for that preference by region, urban-rural residence, and gender. Multiple reasons were allowed, but in this table only the first reason given was tabulated. Reasons for preference were asked of those expressing a preference for either sex over the other, but since a negligible number of respondents preferred a daughter to a son first, the analysis here is confined to those preferring a male child.

The data show that substantial proportions of both male and female respondents from all survey sites reported 'economics' as the first reason for preferring a son to a daughter. This is understandable in the context of pervasive poverty: according to Gillani (1999), only 15 percent of Pakistanis earn more than 7000 rupees per month (US$140), and they expected high expenses on dowries for daughters. Significantly larger proportions of Bahawalnagar than of Lahore women reported economic pressure as their first reason for preferring sons to daughters; this was presumably due to greater poverty in Bahawalnagar than in Lahore. A substantial proportion (13.7 percent) of women in urban Bahawalnagar gave 'Other' reasons for preferring sons. These reasons are expected mostly to link with the feudal influence in Bahawalnagar, under which protection of family honour by having sons, especially among Rajputs, is important (Harlan 1994).

The major gender difference in reports of reasons for son preference is in the emphasis placed on 'social expectation'. Consistently larger proportions of women than of men gave 'social expectation' as a reason for preferring a son to a daughter at all survey sites, although there was barely any difference in urban Bahawalnagar. Social expectation is a sort of social pressure that generates high hopes of having a male child. It stems from parents, the family of one's in-laws, and the larger society. The birth of a son enhances the social status of a woman and provides matrimonial security in the eyes of her in-laws (Shah 1987, Hakim and Aziz 1998). There have been incidents in which

women have been oppressed, tortured, or divorced for not producing male children (RCIW 1997, Human Rights Watch 1999). Therefore, most women, for their social security, prefer male children first.

Table 5.5 Percent distributions of respondents who reported son preference for their first birth by first reason for their preference, by region, urban-rural residence and gender

	Lahore				Bahawalnagar			
	Urban		Rural		Urban		Rural	
	**		**		**		***	
Reason	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**
Social expectation	48.2	71.3	41.8	64.9	22.9	23.1	6.4	29.4
Economic pressure	45.5	20.0	50.5	28.7	72.0	55.6	90.0	46.2
Concern over girls' fate	2.7	6.3	1.1	5.3	0.8	7.7	2.1	17.6
Other	3.6	2.5	6.6	1.1	4.2	13.7	1.4	6.7
Total	100	100	100	100	100	100	100	100
N	**112**	**80**	**91**	**94**	**118**	**117**	**140**	**119**

Source: GDFHS 1998 M=Male F=Female * p<.05 ** p<.01*** p<.001

In urban Lahore, 71.3 percent of women who preferred a male child first gave social expectation as their first reason for doing so, compared with 48.2 percent of men (p<.01). The corresponding figures in rural Lahore were 64.9 percent and 41.8 percent respectively (p<.01). In rural Bahawalnagar, 29.4 percent of women indicated 'social expectation' as the first reason for preferring a son first, compared to only 6.4 percent of males (p<.01). The presence of social expectation is felt more by women than men. Therefore, significantly larger proportions of women than men reported 'social expectation' as the major reason for preferring a son to a daughter as their first child. In urban Bahawalnagar, however, a significant gender differential is evident in the reporting of economic pressure as a reason for son preference, with 72.0 percent of men and 55.6 percent of women reporting this reason (p<.01).

The widespread citing of economic pressure as a reason for son preference is related to expenses on girls' marriages and dowries (Miller 1980, Amin and Cain 1995, Fischbach and Herbert 1997, Anderson 1999). In urban Lahore, 45.5 percent of men and 20.0 percent of women reported economic pressure as the first reason for having wanted a

son first ($p<.01$). Similarly, at the other three survey sites, significantly larger proportions of men than women reported economic pressure as the first reason for son preference. Generally, men are responsible for the economics of households, and their reported concerns about the economic pressure generated by girls' marriages are only logical. They, not women, have to arrange the necessary economic resources to marry their daughters off. This, however, does not mean that women are not worried about marriage expenses.

It may be noted that larger proportions of both men and women from urban and rural sites in Bahawalnagar than in Lahore mentioned economic pressure as their first reason for preferring a son first. In urban Lahore, 45.5 percent of men and 20.0 percent of women reported economic pressure as the first reason for son preference, compared with 72.0 percent of men ($p<.001$) and 55.6 percent of women ($p<.001$) in urban Bahawalnagar. The corresponding figures for rural areas of the two districts were 50.5 and 28.7 percent in Lahore, and 90.0 ($p<.001$) and 46.2 percent ($p<.001$) in Bahawalnagar. These significant regional differentials in the emphasis placed on economic pressure may reflect Lahore being a much more developed region with higher reported incomes than Bahawalnagar (see Section 4.7 in Chapter 4).

Relatively small proportions of both male and female respondents from all survey sites who wanted sons first reported concern about the 'future' or ultimate fate of daughters as their first reason for son preference. These parents appeared to be primarily concerned about the marital adjustment of daughters in the families of their in-laws. They may also have been concerned about prospective difficulties in finding spouses for their daughters. Small proportions of respondents at most survey sites gave 'Other' reasons for preferring a son first.

So far, data on first child have been examined. Table 5.6 presents data on sex preference for the second child. The profiles of data in this table and in Table 5.2 (desired sex of the first child) are similar, but three points stand out from comparing the two tables. Firstly, there is a continuing high preference for a male child for the second birth, although among seven out of eight groups the proportion of respondents who wanted a male second child was smaller than the proportion wanting a male first child. For example, in urban Lahore 40.8 percent of fathers wanted a son first (Table 5.2) and 33.2 percent wanted their second child to be a son (Table 5.6). Secondly, proportions of

respondents wanting a female second child are significantly greater than proportions wanting a female first child. Thirdly, a relatively high proportion (63.9 percent) of women in urban Lahore wanted either sex (63.9 percent) for their first child, but this proportion declined to 47.6 percent for their second child.

Table 5.6 Percent distributions of respondents by desired sex of the second child, by region, urban-rural residence and gender

	Lahore				Bahawalnagar			
	Urban		Rural		Urban		Rural	
				***				
Desired sex	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**
Male	33.2	41.3	32.0	62.1	41.8	41.8	51.3	45.3
Female	12.3	11.1	15.8	12.1	7.6	14.1	4.7	9.4
Either sex	54.5	47.6	52.2	15.8	50.7	44.1	44.0	45.3
Total	100	100	100	100	100	100	100	100
N	**268**	**252**	**203**	**132**	**225**	**213**	**234**	**181**

Source: GDFHS 1998 M=Male F=Female * p<.05 ** p<.01*** p<.001

It should be noted that ages at marriage of sons and daughters encourage people to want a male first child. Daughters marry younger, so that having daughters first makes parents liable to pay dowry well before recouping anything from the marriages of younger sons.

Similarly to the situation in urban Lahore, in urban Bahawalnagar 52.9 percent of men had desired a son first but only 41.8 percent desired a male second child. The corresponding figures for women in rural Lahore were 69.9 percent and 62.1 percent respectively, and among women in urban and rural Bahawalnagar son preference also declined for the second birth. Although these differentials are not statistically significant, the figures suggest that some respondents, after the birth of male first children, may have wanted daughters or children of either sex second. On the other hand, however, the proportion of women from urban Lahore who wished their second child to be male increased to 41.3 percent from 31.7 percent who wanted a male first child.

People generally prefer sons to daughters for their second children. However, the sex preference varies with the sex of the first child. Table 5.7 shows percentage

distributions of respondents by desired sex of the second child, by sex of the first child, region, urban-rural residence, and gender. The data show that larger proportions of respondents who had a daughter first preferred a son second, in six out of eight groups of respondents ($p<.01$ or better).

The same direction of relationship is shown among men in urban Bahawalnagar. In rural Bahawalnagar, however, a larger proportion of men who had a male first child than of those who had a female first child (56.0 percent compared to 44.9 percent) preferred a male second child. This is a bit strange, but perhaps indicates the deep-rooted socio-cultural basis of son preference. Neither of these differences, though, was statistically significant.

Table 5.7 Percent distributions of respondents by desired sex of the second child, by sex of first child, region, urban-rural residence and gender

	Lahore				Bahawalnagar			
	Urban		Rural		Urban		Rural	
				First child male				
	***	***	**	***		***		**
Desired sex	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**
Male	22.6	22.9	24.6	47.1	40.3	26.8	56.0	36.6
Female	14.5	22.0	14.4	17.6	7.2	20.5	3.0	14.9
Either sex	62.9	55.1	61.0	35.3	52.5	52.7	41.0	48.5
Total	100	100	100	100	100	100	100	100
N	**159**	**118**	**118**	**68**	**139**	**112**	**134**	**101**
				First child female				
Male	49.1	57.3	43.4	80.3	44.6	59.0	44.9	55.3
Female	8.3	1.5	16.9	4.9	8.4	6.0	7.1	2.6
Either sex	42.6	41.2	39.8	14.8	47.0	35.0	48.0	42.1
Total	100	100	100	100	100	100	100	100
N	**108**	**131**	**83**	**61**	**83**	**100**	**98**	**76**

Source: GDFHS 1998 M=Male F=Female * $p<.05$ ** $p<.01$ *** $p<.001$

In summary, son preference is deeply rooted in local socio-cultural systems. Economic pressure related to marriage and the dowries of daughters is the major reason for preferring sons to daughters. The second major reason is 'social expectation'. Large proportions of respondents, especially women, giving 'social expectation' as a major reason for son preference indicates deep-rooted socio-cultural biases in favour of sons. The gender composition of prior children has a significant influence on the gender preference of future children. People prefer to have sons, and if a son is the first child, many parents desire a daughter as the second child.

5.3 Education

There were clear-cut gender differences in desired education levels for boys and girls among respondents of both sexes from all survey sites. Table 5.8 shows percentage distributions of respondents by desired education levels for boys and girls according to region, urban-rural residence, and gender. Among men in urban Lahore, 58.9 percent aspired to an MA or professional education in a field like medicine or engineering for their sons, compared with 34.5 percent who desired similar training for their daughters ($p<.001$).

Among fathers in urban Bahawalnagar, 25.1 percent wanted an MA or professional education for their sons and only 13.9 percent desired a similar education for their daughters ($p<.001$). Likewise, female respondents from all survey sites had lower educational aspirations for their daughters than their sons. In rural Lahore, 56.7 percent of women desired a college, university or professional education for their sons compared with only 17.9 percent who wished the same level of education for their daughters ($p<.001$). Corresponding figures among women in rural Bahawalnagar were 46.5 and 25.2 percent respectively ($p<.001$).

An important feature of gender differentials in education relates to religious education. Except in urban Lahore, larger proportions of all groups of respondents wanted religious education for their daughters than wanted such education for their sons. Differentials range from zero among males in urban Lahore to 29.8 percentage points among men in rural Bahawalnagar.

Differentials between fathers and mothers regarding desired education levels for their sons and daughters provide an interesting comparison. The data show that men, in general, favoured less education for their children, both boys and girls, than women at most survey sites. For example, 64.8 percent of mothers in urban Lahore wanted an MA or professional education for their sons compared with 58.9 percent of fathers. In urban Bahawalnagar, 61.5 percent of women and 25.1 percent of men wanted an MA or professional degree for their sons ($p<.001$).

Table 5.8 Percent distributions of respondents by desired education for sons and daughters, by region, urban-rural residence and gender

	Lahore				Bahawalnagar			
	Urban		Rural		Urban		Rural	
	***		***		***		***	
Sons	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**
Up to Middle	1.5	0.0	7.8	6.0	2.6	0.9	19.1	10.2
Matric	3.6	2.4	31.7	25.4	24.7	10.3	32.3	26.2
College	25.8	30.4	27.3	30.6	29.4	20.2	21.3	18.7
MA/Professional	58.9	64.8	19.0	26.1	25.1	61.5	15.7	27.8
Religious/Other	10.2	2.4	14.1	11.9	18.2	7.0	11.5	17.1
Total	100	100	100	100	100	100	100	100
N	**275**	**253**	**205**	**134**	**231**	**213**	**235**	**187**
Daughters	***		***		***		***	
Up to Middle	2.5	0.4	35.1	35.1	17.7	4.7	31.1	15.5
Matric	11.3	4.3	13.7	27.6	24.2	20.2	10.6	19.8
College	41.5	34.4	12.7	4.5	17.7	22.1	10.6	16.6
MA/Professional	34.5	59.3	7.8	13.4	13.9	42.7	6.4	8.6
Religious/Other	10.2	1.6	30.7	19.4	26.4	10.3	41.3	39.6
Total	100	100	100	100	100	100	100	100
N	**275**	**253**	**205**	**134**	**231**	**213**	**235**	**187**

Source: GDFHS 1998 M=Male F=Female * $p<.05$ ** $p<.01$ *** $p<.001$

This is an interesting phenomenon and alludes to gender-specific appreciation of the realities of the socio-economic system. Men are generally involved in public life and

have greater contact with labour markets. Many male respondents were self-employed and favoured a functional amount of education, while mothers probably were sentimental but unrealistic in desiring high levels of education for their sons. They aspired to high status occupations for their children, perhaps as means of upward social mobility, irrespective of the continuing poor job environment.

The data also show substantial variations in desired education levels for sons and daughters between urban and rural respondents from the two districts. In urban Lahore nearly two-thirds of women desired an MAsters or professional degree for their sons, compared with only 26.1 percent of women from rural Lahore ($p<.001$). Similarly, among fathers in urban Lahore, 58.9 percent wanted an MA or professional degree for their sons compared with only 19.0 percent of fathers from rural Lahore ($p<.001$). Among mothers in Bahawalnagar, the corresponding figures were 61.5 percent and 27.8 percent, respectively ($p<.001$). However, the proportions of men from urban and rural Bahawalnagar who wished their sons to have an MA or professional education were similar (25.1 and 27.8 percent). Overall, these data suggest that both men and women from urban areas wanted more education for sons than for daughters. This was expected, because urban people generally are more educated and accordingly value education more highly than their rural counterparts. Secondly, many jobs in cities require high levels of education, and people attempt to acquire those educational skills to enhance their job prospects.

Overall, the data on desired educational levels suggest that both men and women wanted better educations for boys than girls across all survey sites, although mothers aspired to higher levels for children of both sexes than did fathers. People have lower educational aspirations for their children in rural areas than in urban areas. Similarly, people in Lahore have higher educational aspirations for their children than people in Bahawalnagar. It is interesting that larger proportions of women than of men aspire to high levels of education for their children. This may reflect men's greater interaction with public life and consequent realism about employment structures. This may cause them to be more pragmatic in their choice of education levels. Secondly, men may be inclined to want children to enter the job market sooner, so that they can help improve household economic conditions. On the other hand, women's higher educational aspirations may be due to sentimental wishes for upward social mobility.

Table 5.9 shows data on some of the reported reasons for the gender differential in desired education. Large proportions of respondents favoured equal levels of education for boys and girls, but substantial proportions also desired lower levels of education for daughters than sons. Table 5.9 shows the distribution of this latter group by reason for wanting less education for daughters. The data indicate that the vast majority of respondents, both males and females, from all survey sites gave 'domestic role of women' as the major reason for wanting less education for their daughters. More than 80 percent of male and female respondents from urban and rural Bahawalnagar, and more than half of male and female respondents from urban and rural Lahore, who favoured less education for daughters, gave this answer. People think that the role of most girls will be confined to domestic chores, and therefore there is no need for a high level of education for them. In a focus group discussion in urban Lahore, a participant said: "A girl having any level of education will have to do housekeeping".

Table 5.9 Percent distributions of respondents desiring less education for girls than boys by reasons given, by region, urban-rural residence and gender

	Lahore				Bahawalnagar			
	Urban		Rural		Urban		Rural	
				**				
Reason	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**
Domestic role of girls	62.5	67.4	50.0	65.7	89.7	93.9	88.4	84.4
Girls go astray	3.4	2.2	7.5	4.5	1.0	0.0	3.1	2.6
Father dislikes girls' education	8.0	2.2	8.3	7.5	7.2	6.1	8.5	11.7
Disruption in life	9.1	2.2	17.5	0.0	0.0	0.0	0.0	0.0
Other	17.0	26.1	16.7	22.4	2.1	0.0	0.0	1.3
Total	100	100	100	100	100	100	100	100
N	**88**	**46**	**120**	**67**	**97**	**33**	**129**	**77**

Source: GDFHS 1998 M=Male F=Female * p<.05 ** p<.01*** p<.001

This is in line with prevailing gender attitudes towards schooling in the larger society. Both men and women gave similar answers, and gender differentials in reasons for favouring less education for girls were not statistically significant, except in rural Lahore. In rural Lahore, 17.5 percent of male and no female respondents reported

'Disruption in life' as a reason for preferring less education for daughters than sons. This may be due to men's greater sensitivity to women's work in factories, which they might have perceived to be disruptive. Factory workers generally are educated, and this may have prompted men's responses.

To sum up, attitudinal differences in levels of education aspired to for girls and boys are evident from the actual attainment of education by household populations and also from the reported desired levels of education for sons and daughters. First, as shown in Chapter 4 (Figure 4.3), larger proportions of males than females had actually attained higher levels of education at all survey sites. In line with these actual gender differences in education, the educational aspirations of respondents for sons and daughters (Table 5.8) indicate socially entrenched gender biases against female education. Current school enrolment differentials between boys and girls were significant at three survey sites. Table 5.10 shows percentage distributions of children aged 5-14 years by their current school enrolment status, by region, urban-rural residence and gender. In urban Lahore, similar proportions of boys and girls were enrolled.

Table 5.10 Percent distributions of children aged 5-14 years by their current school enrolment status, by region, urban-rural residence and gender

	Lahore				Bahawalnagar			
	Urban		Rural		Urban		Rural	
			***		**		***	
Status	**Boys**	**Girls**	**Boys**	**Girls**	**Boys**	**Girls**	**Boys**	**Girls**
Student	88.5	89.1	62.6	50.7	77.5	70.3	50.0	37.3
Non-student	11.5	10.9	37.4	49.3	22.5	29.7	50.0	62.7
Total	100	100	100	100	100	100	100	100
N	**471**	**412**	**396**	**349**	**503**	**492**	**510**	**472**

Source: GDFHS 1998 * p<.05 ** p<.01*** p<.001

This is encouraging, but these figures should be viewed with caution because education levels among respondents in urban Lahore were high. In urban Bahawalnagar, 77.5 percent of boys and 70.3 percent of girls aged 5-14 years were enrolled (p<.01). In rural Bahawalnagar, half of boys and a little over one-third of girls were enrolled (p<.001). Corresponding figures in rural Lahore were 62.6 and 50.7 percent (p<.001). In

urban Lahore, only about 11 percent of both boys and girls aged 5-14 years were not enrolled in schools.

These regional, urban-rural, and gender differentials in school enrolment are serious. Despite government efforts, they indicate a failure of public policy to adequately encourage schooling of children, especially for girls, and in rural areas. Opening up new schools for girls will help improve school enrolment. However, policy has to address socio-cultural biases against female schooling. In concrete terms, policy has to address gender roles and security issues. People are fearful of the reputations of girls being blemished when they are out in public. As noted in Section 5.2, in a women's focus group discussion in rural Lahore, one participant said: "I am scared of the possibility of my daughters getting imperfect reputations when they go out in public". Another woman said: "The girls' school should be in the village, not in the Bazaar (main road outside village)". Such sensitivities to social stigma and security issues suggest that provision of adequate security may encourage some parents to enrol their daughters.

Significant age-specific gender differentials in school enrolment were reported at most survey sites. Table 5.11 shows that at most ages (5-9, 10-14 and 15-19 years) at most sites larger proportions of boys than girls were enrolled at educational institutions. In rural areas of both districts, significantly larger proportions of boys than girls from all age groups were enrolled. However, gender differentials in school enrolment were not significant in any of the three age groups in urban Lahore, while in urban Bahawalnagar the gender differential was significant only among children aged 10-14 years.

Table 5.11 Percentages of children aged 5-19 years enrolled at education institutions by age, region, urban-rural residence and gender

	Lahore				Bahawalnagar			
	Urban		Rural		Urban		Rural	
Age	M	F	M	F	M	F	M	F
5-9	85.0	87.5	58.8•	46.6	71.2	65.0	47.3•	39.3
10-14	91.0	90.4	67.2•	54.4	84.7•	75.6	53.2•••	35.1
15-19	73.1	71.6	33.1•••	8.8	49.2	44.3	24.2•••	9.7

Source: GDFHS 1998 M=Male F=Female * p<.05 ** p<.01*** p<.001

5.4 Marriage

Marriage is an important social institution in Pakistan. Its importance lies in the high social significance of family in local socio-economic systems. Family plays a crucial role in marriages, which are usually arranged between the families of blood relations, like brothers and sisters. Consanguineous marriages, especially first-cousin marriages, are common in Pakistan (Hussain and Bittles 1998) and result in high fertility due basically to low age at marriage between cousins (Shah et al. 1997, Hussain and Bittles 1999) and related health problems. Table 5.12 shows percentage distributions of respondents by relationship with spouse before marriage, by region, urban-rural residence and gender. The data show that substantial proportions of respondents had married first cousins. In total, 52.7 percent of unions were between first cousins. According to the 1990-91 PDHS, a little less than one-half of marriages were between first cousins (Hussain and Bittles 1998). However, there were significant variations in the prevalence of first-cousin unions across survey sites and between male and female respondents.

For example, in urban Lahore 50.4 percent of men reported a first-sousin union and about one-third of women reported marrying first cousins ($p<.001$). The equivalent figures for rural Lahore were 57.1 percent and 50.7 percent respectively. In urban Bahawalnagar, 71.4 percent of men and 32.4 percent of women reported first-cousin unions ($p<.001$). The corresponding figures for rural Bahawalnagar were 77.9 percent and 51.4 percent ($p<.001$). Significantly higher proportions of men reporting first-cousin unions is surprising. Exchange marriage is common in Bahawalnagar, and clusters of respondents in different villages and survey localities in urban and rural Bahawalnagar who had followed this custom may have contributed to the higher prevalences of first-cousin marriages among males. Secondly, some male interviewers may have confused first and second-cousin marriages. In urban Lahore, nearly nine percent of men and over one-quarter of women reported out-of-caste marriages. Women in urban Lahore were educated (median education was matriculation) and might have sought social mobility through out-of-caste marriages. The urban survey site in Lahore was Allama Iqbal Town, which is a fairly new settlement built from the 1970s onwards. The residents of this suburb are settlers from a variety of different castes from Lahore and the Punjab Province. The diversified profile of respondents may have contributed to the unusually

high proportion of women reporting out-of-caste unions, although it is unclear why the proportion of men doing so is so much lower.

In Bahawalnagar, a significant urban-rural differential in first-cousin marriages was reported in Bahawalnagar. For example, among female respondents, about one-third in urban and just over one-half in rural Bahawalnagar had married first cousins. First-cousin marriages are more common in Bahawalnagar than in Lahore. This is expected, because Bahawalnagar is underdeveloped and less educated. Exchange marriages are more common in Bahawalnagar than in Lahore, which may also have contributed to the high incidence of consanguineous unions reported by men. These data show that first-cousin marriages are common in urban and rural areas of both districts.

Table 5.12 presented information on respondents' own marriages. In Table 5.13, respondents' preferences about the consanguinity of their children's marriages are presented. The data were gathered to assess attitudes towards consanguineous and caste marriages. They show significant differentials between male and female respondents with respect to preferences for first-cousin and in-caste marriages. As figures with respect to sons and daughters are similar, discussion is confined to the data on sons only.

Table 5.12 Percent distributions of respondents by prior relationship with spouse, by region, urban-rural residence and gender

	Lahore				Bahawalnagar			
	Urban		Rural		Urban		Rural	
	***		*		***		***	
Prior Relationship	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**
First-cousin	50.4	31.2	57.1	50.7	71.4	32.4	77.9	51.4
Within caste	40.9	42.7	38.0	37.3	23.4	60.6	16.6	47.0
Out-of-caste	8.8	26.1	4.9	11.9	5.2	7.0	5.5	1.6
Total	100	100	100	100	100	100	100	100
N	**274**	**253**	**205**	**134**	**231**	**213**	**235**	**185**

Source: GDFHS 1998 * p<.05 ** p<.01*** p<.001

In urban Lahore, one-third of men favoured first-cousin marriages for their sons compared with only one-fifth of women (p<.001). Over three-fifths of men and over one-half of women favoured in-caste marriages (p<.001), while nearly a quarter of women but

only around five percent of men favoured out-of-caste marriages (p<.001). This later finding is surprising. The recording of the focus group discussion with women in urban Lahore suggests that these women were vocal and seemed to understand the dynamics of social mobility. Out-of-caste marriages broaden spousal choice. These often well educated women may have viewed out-of-caste marriages as an avenue for upward social mobility for their children. Secondly, the residential suburb where data were gathered was built in the 1970s, and residents had come to it from different parts of the Punjab. In a way, they were immigrants from different castes and different regions, and some women, in stating a preference for out-of-caste marriages, may have had in mind specific partners for their children who were not of their own castes.

Table 5.13 Percent distributions of respondents showing preferences for types of marriage partners for sons and daughters by region, urban-rural residence and gender

	Lahore				Bahawalnagar			
	Urban		Rural		Urban		Rural	
	***		***		***		***	
Sons	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**
First-cousin	32.7	19.0	49.8	25.4	55.8	6.6	63.2	10.8
Within caste	61.8	55.3	47.8	68.7	43.3	91.1	32.9	87.1
Out-of-caste	5.5	25.7	2.4	6.0	0.9	2.3	3.8	2.2
Total	100	100	100	100	100	100	100	100
N	**272**	**253**	**205**	**134**	**231**	**213**	**234**	**186**
Daughters								
	***		***		***		***	
First-cousin	32.6	20.2	51.7	24.6	55.8	6.1	59.9	10.8
Within caste	62.6	53.8	45.9	67.9	43.7	90.6	36.2	87.1
Out-of-caste	4.8	26.1	2.4	7.5	0.4	3.3	3.9	2.2
Total	100	100	100	100	100	100	100	100
N	**270**	**253**	**205**	**134**	**231**	**213**	**232**	**186**

Source: GDFHS 1998 M=Male F=Female * p<.05 ** p<.01 *** p<.001

Gender differentials in preferences for first-cousin and in-caste marriages were significant at all survey sites. In rural Lahore, nearly half of men but only a quarter of women favoured first-cousin marriages for sons (p<.001). The corresponding figures for

urban Bahawalnagar were 55.8 percent and 6.6 percent, respectively ($p<.001$). Similarly, in rural Bahawalnagar, 63.2 percent of men and only 10.8 percent of women favoured first-cousin marriages ($p<.001$) (Table 5.13).

These data suggest that men are more traditional than women in their attitudes towards consanguineous versus in-caste marriages. They in general head their families, and contribute actively towards matrimonial unions and related matters. As there is less chance of surprises regarding cousin marriages, larger proportions of men than of women may have preferred first-cousin marriages. Secondly, expectations of dowry between first cousins are usually low, and accordingly, dowries are not as big an issue. Because men are mostly responsible for economic matters, they are more likely to prefer cousin marriages. These findings are in line with suggestions by Hussain and Bittles (1998:273) that both economic and social rationales contribute towards consanguineous unions. It might be argued that men should favour out-of-caste marriages for sons in order to receive larger dowries. While this is plausible, sons' marital adjustment, the avoidance of surprises, and the reciprocity implicit in exchange marriage may have more importance for them than receiving larger dowries.

The other plausible explanation for women's more liberal attitudes is that they, often being the victims of mismatched inter-cousin marriages, preferred to widen spousal choice through either in-caste or out-of-caste marriages. Many highly qualified girls are married to uneducated cousins. Obviously girls' mothers do not like such practices, which may have prompted them to prefer within-caste or out-of-caste marriages.

Chi square tests reveal that there were significant urban-rural differentials in whether cousin or caste marriages were favoured. In Lahore, 32.7 percent of urban compared with 49.8 percent of rural men favoured first-cousin marriages ($p<.001$). The corresponding figures in Bahawalnagar were 55.8 and 63.2 percent respectively ($p<.05$). In rural areas, the economic rationale of keeping property within the family is expected to play a role in encouraging consanguineous unions (Hussain and Bittles 1998:273). In Lahore, 19.0 percent of urban and 25.4 percent of rural women favoured first-cousin marriages ($p<.01$) (Table 5.13). However, among women in Bahawalnagar, the urban-rural differential was not significant.

Women in Bahawalnagar were less favourable than those in Lahore to cousin marriages. This might have happened because larger proportions of Bahawalnagar than

Lahore respondents were married to their first cousins. For example, 41.2 percent of urban and 54.6 percent of rural respondents in Lahore compared to 52.7 percent of urban ($p<.001$) and 66.2 percent of rural ($p<.01$) respondents in Bahawalnagar were married to their cousins. The higher incidence of cousin marriage is likely to have influenced responses of respondents in Bahawalnagar against cousin marriages.

All cousin marriages, obviously, are in-caste marriages. The summing of in-caste and cousin marriages shows that 90 percent of both male and female respondents across seven out of eight survey groups preferred to find spouses from within their own castes. Women in urban Lahore were the only exception, with one-fourth of them favouring out-of-caste marriages. A probable explanation is the prospect of social mobility arising from broadening of the marriage market. In summary, people, in general, prefer consanguineous and in-caste marriages. Men, in general, were more favourable to cousin marriages than women were. Caste marriages were common, but a substantial proportion of women in urban Lahore favoured out-of-caste marriages, probably owing to high levels of education among women in urban Lahore.

5.4.1 Ideal Age at Marriage

Change in age at marriage is at the heart of demographic transition in Europe and many Asian countries (Caldwell 1995), and age at marriage rises with increasing literacy and education (Caldwell et al. 1982). An early age at marriage contributes to high fertility. It has gender and health repercussions, especially for women. Early marriages among women are associated with low female education, contributing to low status and a perpetuation of patriarchy (Heaton 1996). Early marriages are linked with increasing divorce rates in Western countries (Carmichael and McDonald 1988), but in Pakistan youthful marriages may be preferred as lowering the risk of divorce. Parents think that early marriages help brides adjust to their new families (the families of their in-laws). Table 5.14 shows median ideal ages at marriage for boys and girls by region, urban-rural residence and gender of respondent. The ideal age at marriage for girls was consistently lower than that for boys among both men and women in all survey populations. The median ideal age at marriage for sons in urban Lahore and Bahawalnagar was 25 years, while that for daughters was 20 years. In rural Lahore, the median ideal age at marriage for sons was 22 years and that for girls was 18 years. The corresponding figures in rural

Bahawalnagar were 20 and 18 years. Although median age at marriage for both men and women has increased over the last five decades, it is still low (Sathar and Kiyani 1998).

The gender differentials in ideal ages at marriage for boys and girls ranged from two years in rural Bahawalnagar, through four years in rural Lahore, to five years in urban areas of the two districts. The wider gender differentials in urban areas are understandable, because urbanites are more dependent on private/public sector jobs than their rural agriculturist counterparts. Respondents in urban areas preferred to wait for boys to be employed before getting them married, while agriculture provided ready jobs to rural young men. The gender differential in age at marriage is reported to have declined slightly, but is still high and conducive to a marriage squeeze characterized by a shortage of marriageable men (Sathar and Kiyani 1998).

Larger proportions of urban than of rural respondents aspire to high levels of education for their children, and this pushes up age at marriage. Moreover, jobs are not readily available for young men in urban areas, and parents like to ensure economic security before committing their sons to matrimony. Rural inhabitants, by contrast, do not have to wait for their sons' employment in city-based public or private organizations.

Table 5.14 Median ideal ages at marriage of sons and daughters by region, urban-rural residence and gender

	Lahore				Bahawalnagar			
Gender	**Urban**		**Rural**		**Urban**		**Rural**	
	M	F	M	F	M	F	M	F
Sons	25	25	22	25	23	25	20	20
N	**273**	**253**	**205**	**134**	**231**	**212**	**235**	**186**
Daughters	20	22	18	18	18	20	18	18
N	**273**	**253**	**202**	**134**	**229**	**209**	**235**	**185**

Source: GDFHS 1998

The median ideal ages at marriage for daughters reported by mothers were higher by two years than those reported by fathers in urban Lahore and Bahawalnagar. This finding is in line with mothers' higher educational aspirations for their daughters (Table 5.8). Women want their daughters' status to improve, and more education and later marriage can help towards that end. In rural areas of the two districts, mothers and fathers

reported the same median age at marriage (18 years) for their daughters. For sons, women in rural Lahore wanted later marriages than fathers, as they did also in urban Bahawalnagar. These findings are in line with women's higher educational aspirations for their children, especially daughters.

A comparison of data on ideal ages at marriage for children and actual ages at marriage of respondents shows that the actual median ages at marriage of men were mostly lower than reported ideal ages at marriage for sons (see Tables 5.14 and 5.15). Only in rural Bahawalnagar were the actual and ideal median ages at marriage the same. Differentials between ideal ages at marriage for daughters and actual ages at marriage of female respondents were small or non-existent. In urban and rural Lahore, the median ideal ages at marriage were higher by one year than the median actual ages at marriage, but in Bahawalnagar there were no differences.

Parents, in general, preferred younger ages at marriage for girls than for boys. They were not concerned about daughters' employment. Daughters are usually considered a burden, and parents like to marry them off as soon as possible. Focus group discussions and several interviews with women suggested that many women in rural areas favoured marrying daughters right after puberty. In a female focus group in rural Lahore, one participant said: "Girls should be married at the age of 18 years". Another woman said: "Once a girl starts menstruating, marry her". In Table 5.22, presented later in this chapter, one of the gender-related common sayings listed is: "Daughters are a burden, marry them off sooner rather than later".

Table 5.15 Median ages at marriage of respondents by gender, region and urban-rural residence

	Lahore		Bahawalnagar	
Gender	**Urban**	**Rural**	**Urban**	**Rural**
Men	24	20	20	20
N	**275**	**205**	**231**	**235**
Women	19	17	20	18
N	**253**	**134**	**211**	**187**

Source: GDFHS 1998

Some people, however, desired high levels of education for their daughters. These parents sought greater socio-economic security and to enhance their daughters' marriage prospects by having them well educated. They also thought that education would make them better mothers. Any parental inclination to educate girls to a higher level results in an increase in the ideal age at marriage. By educating their daughters well, some parents not only feel relieved from possible future strains associated, for example, with divorce, but also consider they have improved those daughters' economic and social security. Such attitudes may have raised ideal ages at marriage for girls in urban compared to rural areas. In a focus group discussion with women in urban Lahore, a participant said: "Girls should be educated to a minimum of BA or BEd. It is better to be BEd, so that she could do something for herself". However, another woman interjected: "Even after doing an MA, you cannot change their fate".

5.5 Autonomy of Women

Women's empowerment and autonomy are known to have links with their health (Hakim and Miller 1996, Karim 1994, Kar et al. 1999, Lee 1999). It is suggested that women's empowerment is likely to improve their health, as they can take decisions beneficial to their own health and welfare (Sathar and Kazi 1997). This may particularly be true in a male-dominated society like Pakistan. Some serious constraints on women's autonomy have been acknowledged in rural Punjab (Sathar and Kazi 1997). Autonomy of women was measured in two ways, first, by freedom to take decisions over buying household items such as groceries, clothing, and durable goods; second, by freedom of mobility to visit places like shopping centres or health centres.

5.5.1 Decision-making Autonomy

To assess women's autonomy regarding decision making at household level they were asked how frequently they bought groceries, clothing for their children and for themselves, and durable goods like washing machines and refrigerators, and how frequently they had to give account of the money they received from their husbands. Each of these five variables was coded 1-4 according to whether the frequency given was 'always/usually', 'sometimes', 'occasionally' or 'never'. Codes were summed over the

five variables and divided by five to yield an index with a value between 1 and 4. Three categories of 'Low', 'Medium' and 'High' autonomy were then created. Scores of 1-1.99 denoted high autonomy, 2.00-2.99 medium autonomy, and 3.00-4.00 low autonomy.

Table 5.16 shows percentage distributions of female respondents by level of decision-making autonomy, by region and urban-rural residence. The data show an expected pattern of female autonomy across urban and rural sites in the two districts. Urban women in both districts had higher autonomy than their rural counterparts. Women in rural Lahore display the lowest autonomy, over three-fifths of them being classed as having low autonomy compared to one-third in rural Bahawalnagar and less than one-fifth of women in urban areas.

Table 5.16 Percent distributions of female respondents by level of decision making autonomy, by region and urban-rural residence

	Lahore		**Bahawalnagar**	
	***		***	
Decision making autonomy	**Urban**	**Rural**	**Urban**	**Rural**
Low	17.0	64.4	16.1	35.7
Medium	32.0	22.7	37.0	45.9
High	51.0	12.9	46.9	18.4
Total	100	100	100	100
N	**253**	**134**	**211**	**185**

Source: GDFHS 1998 p<.05 ** p<.01*** p<.001

There are two plausible explanations. First, poorer sections of the village in Lahore were disproportionately covered. This may have biased the autonomy profile of women in rural Lahore. Second, owing to the destabilization of gender structures and to perceived insecurity in the village, men may have put extra constraints on women's decision making roles. Substantial proportions of women at all survey sites had medium autonomy, which seems normal given socio-political circumstances in the country in general, and in the survey sites in particular. In lower-middle class communities such as those surveyed, high autonomy is not encouraged and low autonomy is not functional. In this context, medium autonomy may be the minimum required for the functioning of

traditional communities, although women probably aspire to high autonomy in decision making and appear to have widely achieved it in urban areas (Table 5.16).

5.5.2 Freedom of Mobility

To assess the freedom of mobility of women, they were asked a set of questions on their capacity to travel alone to visit a local health centre, shopping centre, community centre, relatives, fields outside the village, the next village, and fairs and shrines. For comparative purposes, an index was developed by allocating a score of either one or zero to each of the seven items, according to whether or not a woman was free to travel for the purpose in question. The minimum score was zero and the maximum was seven, and three categories of 'Low' (0-2), 'Medium' (3-6) and 'High' (7) freedom of mobility were created.

Table 5.17 shows percentage distributions of female respondents by level of freedom of mobility, by region and urban-rural residence. Nearly two-thirds of women had high freedom of mobility in urban Lahore, compared with one-third in urban Bahawalnagar ($p<.001$). The fact that women in Lahore are more educated than their counterparts in urban Bahawalnagar may have contributed to their greater freedom of mobility.

Table 5.17 Percent distributions of female respondents by level of freedom of mobility, by region and urban-rural residence

	Lahore		Bahawalnagar	
	***		***	
Freedom of mobility	**Urban**	**Rural**	**Urban**	**Rural**
Low	29.2	38.1	17.8	31.0
Medium	7.5	16.4	48.4	18.7
High	63.2	45.5	33.8	50.3
Total	100	100	100	100
N	**253**	**134**	**213**	**187**

Source: GDFHS 1998 p<.05 ** p<.01*** p<.001

The regional differential in freedom of mobility between women from rural parts of the two districts was minor. Some 45.5 percent of women in rural Lahore and 50.3 percent of women in rural Bahawalnagar reported high freedom of mobility. One might have expected a higher proportion of women in rural Lahore to have high freedom of mobility, because rural Lahore is well connected with urban and industrial areas. However, on the other hand, the industrialization of rural Lahore may have had negative effects on women's freedom of mobility there. It should be noted that questions related to 'fields outside village' and 'visiting next village' are not generally applicable in urban settings. Interviewers might have tended to code women as free to travel in these places in urban Lahore and not free to do so in urban Bahawalnagar. This would have transferred many women at the later survey site from the 'High' to the 'Medium' mobility category.

5.6 Religiosity

Scholars generally agree that "religious tenets are not the cause of women's lesser standing in the liturgy and leadership of religious or secular communities and institutions" (Lummis 1999:601). Secondly, most 'original' religious traditions placed equal value on males and females, but male religious leaders, worldwide, used selective texts to legitimate patriarchy (Esposito 1995:5 cited in Hassan 1999b:3). It is also argued that gender structures in Muslim Pakistan are shaped by the patriarchal Arabian origins of Islam. While this is true, Muhammad introduced "wide-ranging legal-religious enactments to improve the position and status of women in Arabian society" (Hassan 1999b:3). Local socio-cultural structures are much more important than religion alone (Mason et al. 1998). Nevertheless, religion still provides legitimacy to patriarchal structures in Pakistan and elsewhere.

Religiosity is used as a tool to preserve tradition, patriarchy, and feudal culture. Women, in general, play a key role in the preservation of tradition through the engenderment of young children. Therefore, female religiosity is vital to the retention of tradition and patriarchy. Table 5.18 shows that larger proportions of women than of men in both districts were religious. Religiosity was measured in terms of the frequency of saying prayers. If a respondent reported praying one or more times a day, he/she was deemed religious, and those who said their prayers irregularly were 'not-so-religious'.

Table 5.18 Percent distributions of respondents by religiosity, by region, urban-rural residence and gender

	Lahore				Bahawalnagar			
	Urban		Rural		Urban		Rural	
	***		***		***			
Religiosity	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**
Religious	37.4	71.1	19.5	56.9	31.9	56.6	23.0	29.6
Not-so-religious	62.6	28.9	80.5	43.1	68.1	43.4	77.0	70.4
Total	100	100	100	100	100	100	100	100
N	**273**	**253**	**200**	**123**	**229**	**212**	**235**	**186**

Source: GDFHS 1998 * p<.05 ** p<.01*** p<.001

In urban Lahore, nearly three-fourths of females and a little over one-third of men were religious (p<.001). Corresponding figures for urban Bahawalnagar were 56.6 percent and 31.9 percent, respectively (p<.001). A similar gender differential was found in rural Lahore, where 56.9 percent of women compared with only 19.5 percent of men were religious (p<.001). However, the gender differential in rural Bahawalnagar, though in the same direction, was not significant. Women in rural Bahawalnagar were less religious than their counterparts at the other three survey sites. This is possibly due to the measure of religiosity used in this study, i.e. 'saying prayers'. People in underdeveloped rural areas are normally more traditional than people in rural areas of developed districts, but saying prayers may not be a good measure in those underdeveloped villages. Extremely poor people may be too preoccupied with survival to have the time for prayers or they are simply too ignorant.

In summary, larger proportions of women than of men were religious across all survey sites. Religiosity among women is functional for patriarchy, and local social structures encourage religiosity among women to promote traditional attitudes. As a result, women willingly accept low social status and believe in the supremacy of men.

5.7 Major Concerns about Sons and Daughters

To show gender disparities, data on variables like education and employment are usually presented. But these variables are not the causal factors underpinning the low

status of women. Rather the disparities they evidence are the effects of gender-biased social conditions. These conditions produce in parents different concerns regarding male and female children. Table 5.19 shows percentage distributions of respondents according to major concerns expressed about the future lives of their sons and daughters by region, urban-rural residence and gender. Multiple answers were allowed, but the data in the table are based on the first responses given by respondents.

Table 5.19 Percent distributions of respondents by major concerns about the lives of their sons and daughters, by region, urban-rural residence and gender

	Lahore				Bahawalnagar			
	Urban		Rural		Urban		Rural	
			***		*			
Sons	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**
Education	27.2	36.3	16.8	31.5	31.2	46.5	26.1	31.6
Employment	17.5	17.9	25.3	42.5	25.1	23.5	21.6	18.1
Marriage	0.8	2.5	2.1	1.6	1.9	0.5	6.8	13.6
Other	16.3	13.8	15.3	12.6	8.8	7.0	8.6	6.8
None	38.2	29.6	40.0	11.8	33.0	22.5	36.9	29.9
Total	100	100	100	100	100	100	100	100
N	**246**	**240**	**190**	**127**	**215**	**200**	**222**	**177**
Daughters								
	***		***		***			
Education	7.2	20.2	4.1	8.8	6.2	20.9	4.4	9.7
Employment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Marriage	38.0	43.8	52.4	74.4	52.4	55.1	57.1	54.5
Other	8.1	5.6	1.2	2.4	0.5	1.6	1.0	2.8
None	46.6	30.5	42.4	14.4	41.0	22.5	37.6	33.0
Total	100	100	100	100	100	100	100	100
N	**221**	**233**	**170**	**125**	**210**	**187**	**205**	**176**

Source: GDFHS 1998 M=Male F=Female * p<.05 ** p<.01*** p<.001
Note: All differentials between distributions for sons and daughters are significant at p<.001

The data show significant differentials in parental concerns about the future lives of sons and daughters. The major gender differentials are associated with education,

employment, and marriage. Most parents, both fathers and mothers, were more concerned about the education and employment of sons than of daughters. On the other hand, the major concern about daughters was with their marriage. The second major concern about daughters was their education.

Parents, especially from rural areas, feel that education introduces modernization trends to girls, which they do not like. They consider that modernization is morally bad and makes it harder for their daughters to adjust after marriage. This may actually be a misconception. Southeast Asian societies have modernized in recent years and their divorce rates have also fallen (Jones 1997).

In urban Lahore, 36.3 percent of mothers were concerned about the education of sons compared with only 20.2 percent who were concerned about the education of daughters ($p<.001$). Similarly, 27.2 percent of male respondents from urban Lahore were concerned about the education of their sons while only 7.2 percent had concerns for their daughters' education ($p<.001$). Substantial proportions of respondents, both males and females, in all survey sites showed concern about the employment prospects of sons, but no respondents were concerned about the employment of their daughters.

This is understandable, because the normal social role of most women in Pakistan is housekeeping, and parents, accordingly, are not concerned about daughters' employment. The proportions of respondents who showed concern about sons' employment ranged from 17.5 percent among fathers in urban Lahore to 42.5 percent among mothers in rural Lahore (Table 5.19). People who were concerned about the education of sons were indirectly also worried about their employment and status. People generally believe that high education will enhance employment prospects and bring improvement in social status.

Large proportions of respondents from all survey sites were concerned about the marriages of their daughters. Concern over marriage prospects ranged from 38.0 percent among fathers in urban Lahore to 74.4 percent among mothers in rural Lahore. These data show that most parents are uneasy about marriage-related aspects of their daughters' lives, including finding a suitable husband, dowry and marital adjustment. In a focus group discussion with women in urban Lahore, a woman said: "The first concern about daughters is to find a spouse and then dowry". The moderator mentioned an incident when, on the death of a young girl, her grandmother said to her mourning daughter: "Why

are you crying, rather thank God, the pressure (*balaa*) is off". At this point one woman said: "Actually they did not want her (the girl)". Another woman interjected: "Yes, from where could she arrange five to six lac" (Rs.500,000 - 600,000 or US$12,500 - 15,000 for her marriage/dowry). The moderator asked: "If a boy had died, do you think the grandmother would have had the same feelings?" One woman spontaneously said: "No, not at all". At this point, another woman became sympathetic to female children and said: "I pray that God may have given me four girls but no boys".

In a focus group discussion with men in urban Lahore, one participant told a story from his relatives: "A four year-old girl died. When her maternal uncle came to visit his mourning sister, she started crying. He said to her: 'Why are you crying, you have won a lottery. You had to spend three lac (300,000 rupees or US$7,500) on her wedding, which you have saved.' "

The highest proportion of female respondents concerned about the marriage of daughters (74.4 percent) was recorded by females in rural Lahore. This may be due to a combination of poverty and destabilization of local gender structures. The poor economic status of rural households may have increased worries about expenses on dowry. Interviewing in this village was not completed as planned, and female interviewers started from one end of the large village where mostly poor households were concentrated. This is evident from the large proportion of *kutcha* houses reported among households represented by women. At the same time, mothers were probably uneasy about the image of young girls. According to one informant, nearly 150 rural women were working in neighbouring vegetable packing factories, and many of these were young unmarried girls. People were fearful about others slandering these working girls as of loose character. It is possible, therefore, that mothers from rural Lahore may have exhibited anxiety about possible social stigma, and its impact on the marriageability of their daughters. This argument received support from the focus group discussion reported in section 5.2 of this chapter.

Finally, substantial proportions of respondents did not show any concern about the future lives of their children. The proportions of such respondents across seven out of the eight groups of respondents were similar (see Table 5.19). It is possible that many people did not want to worry about the future, over which many believe they have no control. They were happy to leave the future to fate. In rural Lahore, less than 15.0 percent of

female respondents recorded no concern for their sons and daughters. It is likely that these women were anxious about the local social environment. Social disapproval of women's work in factories and teasing of girls probably contributed to their greater concerns about daughters.

Particularly high levels of concern about the employment of sons are understandable. People are poor and unemployment in the past several years has been growing, as is evident from the fact that poverty in Pakistan increased by 50 percent in the first half of the 1990s (MHDC 1999). In such depressing economic circumstances, public concern about the employment of sons is logical.

The above analysis was based on an open-ended question about major parental concerns about their sons and daughters. In the following section, a set of structured questions about various life aspects of sons and daughters is analysed. There is some repetition between these two sections, but both are presented to emphasize the point that sons are preferred because of greater concerns and worries about daughters, who are a potential source of trouble for parents. These troubles relate to their security, spouse finding, dowry and wedding costs, and marital adjustment. On the other hand, the nature of concerns about sons is different. Education and employment concerns about sons are focused on enhancing the socio-economic status of the family through better education and jobs. These concerns are not potential sources of trouble.

5.7.1 Concerns about Various Life Aspects of Sons and Daughters

In the last two decades, Pakistan's social environment, especially in major cities, has been substantially transformed. Increased poverty, unemployment, widespread corruption and lawlessness have created stressful conditions. The incidence of rape, especially of minors, is reported to have increased (RCIW 1997). In the midst of such an environment, the unjust implementation of rape laws has produced new gender-based security concerns (RCIW 1997). New social contradictions have emerged in the Pakistani social system. For example, religious traditions were reinforced, but increased lawlessness resulted in an increasing incidence of rape and violence against women (RCIW 1997). In such an environment, people became increasingly wary about the security of girls and women, which may have intensified son preference.

To study the concerns of parents about their sons and daughters, seventeen aspects of children's lives were selected and parents were asked to what extent they were worried or concerned about these aspects of their sons' and daughters' lives. These life aspects included educational performance, expenses on education, transport to school, and religious education. Various aspects bearing on security at home and in public were also included, as were issues such as finding a spouse, marriage expenses, and marital adjustment. Employment, drug abuse, and the health of children were also covered. On each question, parents were invited to indicate extreme, high, moderate, little, or no concern. These five categories were assigned scores from five to one, and these in turn were used to calculate mean scores on independent items. The maximum possible score was five and the minimum was one.

There were two objectives: first, to assess the levels of parental concern about different aspects of the lives of sons and daughters; secondly, to assess whether there were any significant differences in levels of concern between sons and daughters. These concerns are important owing to the central role of the institution of the family in Pakistan. If parents are concerned about certain aspects of their children's lives, their psycho-physical health is likely to suffer.

Table 5.20 shows mean levels of concern about different aspects of children's lives by region, urban-rural residence, and gender. It covers aspects in which parents were more concerned about their sons than their daughters. Table 5.21 then shows mean levels of concern for life aspects in which parents were more concerned about their daughters. The greatest concerns shown by both male and female respondents across all survey sites were about the employment of their sons, the marriages of their daughters, and the education of both sexes, but more particularly sons. Employment concerns in respect of sons and marriage concerns in respect of daughters are understandable.

Sons in the patriarchal Pakistani social system provide economic support to parents, whose concern for their education and employment acknowledges their economic significance. However, variations across survey sites depend upon the local socio-cultural milieu and economic conditions of households. For example, the high mean scores of 3.12 and 2.52 for sons' employment among women in urban and rural Bahawalnagar seem to be the result of widespread poverty and unemployment in the underdeveloped district of Bahawalnagar.

Table 5.20 Mean levels of concern about different aspects of respondents' sons' and daughters' lives by region, urban-rural residence and gender: aspects in which concern for sons was generally greater

	Lahore				Bahawalnagar			
	Urban		Rural		Urban		Rural	
	M	F	M	F	M	F	M	F
Educational performance	***	***	***	***	**	***	***	***
Sons	2.44	1.96	1.86	2.04	2.06	3.39	1.74	2.29
Daughters	2.12	1.64	1.43	1.42	1.88	2.77	1.50	1.78
Educational expenses		*	***	*	*	***	***	***
Sons	2.15	1.93	2.16	2.13	2.25	3.21	1.95	2.53
Daughters	2.07	1.81	1.58	1.85	2.08	2.75	1.56	1.98
Employment	***	***	***	***	***	***	***	***
Sons	2.09	2.29	2.18	2.38	1.72	3.12	2.25	2.52
Daughters	1.37	1.35	1.25	1.44	1.18	1.54	1.46	1.48
Morality		***		**		***		***
Sons	1.57	1.70	1.60	1.66	1.19	2.05	1.57	1.55
Daughters	1.58	1.17	1.49	1.34	1.19	1.21	1.60	1.18
Straying		**	*	**		***		
Sons	1.51	1.63	1.41	1.63	1.15	1.65	1.42	1.30
Daughters	1.46	1.32	1.25	1.32	1.17	1.09	1.50	1.16
Drug abuse		***	**	***				
Sons	1.26	1.73	1.02	1.73	1.05	1.21	1.32	1.22
Daughters	1.31	1.27	1.04	1.27	1.10	1.09	1.37	1.15
Health		**	**	**				*
Sons	2.07	1.77	1.69	1.77	1.58	2.34	1.59	1.98
Daughters	1.99	1.41	1.70	1.41	1.53	2.14	1.63	1.73

Source: GDFHS 1998 M=Male F=Female * p<.05 ** p<.01 *** p<.001

Regarding the marriages of daughters, respondents showed different levels of concern about different aspects of marriage, including finding a spouse, marriage expenses, and marital adjustment. These three marriage aspects have a close connection with household economic and social circumstances. The marriage of daughters is a major burden, and respondents showed a concern over the burden of dowry. But people are not concerned merely about daughters' dowries. They are concerned about finding them spouses and their marital adjustment as well. Marriage is an important social institution

and takes a substantial proportion of people's socio-economic resources and time. If people are concerned about these issues, they are expected to influence their psycho-social lives.

The data indicate that women generally were more concerned about various aspects of their children's lives than their male counterparts. Men work to earn a livelihood and women are more involved with the socio-cultural aspects of family and inter-family relationships. Women are expected to interact with children more than their husbands, because men spend a lot of time away from home for work activities. Women mostly are housewives and are more involved with social relationships. In such circumstances, it is not surprising that women were more concerned than men with various aspects of children's lives.

The values of mean levels of concern appear to be higher for matters related to the marriage of daughters. For example, among women in urban Bahawalnagar the scores of 3.39, 3.44, and 3.18 in relation to marriage matters show high levels of concern about marriage issues. Apparently, marriage concerns are more pressing in Bahawalnagar than in Lahore. This may be due to poverty-related concerns about dowry. Because of poverty, people cannot afford increasing expenses on weddings and dowries. Secondly, exchange marriage is common in some communities in Bahawalnagar. In exchange marriage, family A's son marries family B's daughter in exchange for family B's son marrying family A's daughter. If one union does not work out well, the other faces familial pressure to do the same, leading sometimes to the breakup of both unions.

Security is an issue while children are at school or the bazaar, but is not a major concern while they are at home. For example, among female respondents in urban Lahore, the mean score on concern for daughters' security while at school was 2.42, compared with 1.59 while they were at home ($p<.001$). Both male and female respondents across all survey sites showed some concern about protecting the modesty of girls, the figures generally showing greater concern when daughters were at the bazaar, followed by when at school, and then at home. This concern is due to the severe social stigma attracted should a daughter's reputation be flawed. People tolerate unbecoming behaviour by sons, but not by daughters.

Table 5.21 Mean levels of concern about different aspects of respondents' sons' and daughters' lives by region, urban-rural residence and gender: aspects in which concern for daughters was generally greater

	Lahore				Bahawalnagar			
	Urban		Rural		Urban		Rural	
	M	F	M	F	M	F	M	F
Commuting to school		**				***		
Sons	1.43	1.11	1.10	1.11	1.08	1.22	1.19	1.37
Daughters	1.45	1.27	1.02	1.15	1.14	1.48	1.10	1.40
Religious education								
Sons	1.84	1.24	1.44	1.07	1.63	2.28	1.67	1.67
Daughters	1.74	1.27	1.41	1.19	1.57	2.13	1.65	1.75
Security while at school	***	***	**	**	***	**		**
Sons	1.62	2.05	1.10	1.36	1.14	1.25	1.25	1.20
Daughters	2.15	2.42	1.25	1.63	1.36	1.49	1.24	1.38
Security while at home		***	***	***		**		***
Sons	1.22	1.19	1.01	1.23	1.03	1.06	1.14	1.04
Daughters	1.32	1.59	1.09	1.46	1.08	1.32	1.13	1.27
Modesty while at school	***	***	**	***	**	***	***	***
Sons	1.37	1.61	1.02	1.23	1.05	1.06	1.04	1.04
Daughters	1.66	1.94	1.18	1.52	1.20	1.34	1.54	1.54
Modesty while at home	*	***	***	***	*	***	***	***
Sons	1.20	1.19	1.04	1.08	1.03	1.06	1.09	1.09
Daughters	1.34	1.49	1.34	1.43	1.15	1.36	1.66	1.66
Modesty while at bazaar	***	***	***	***	***	***	***	***
Sons	1.47	1.70	1.21	1.17	1.26	1.17	1.28	1.28
Daughters	2.57	2.09	2.53	1.69	1.81	1.69	1.88	1.88
Spouse finding	***	***	***	***	***	***	***	***
Sons	1.46	1.24	1.37	1.92	1.65	1.92	2.28	2.28
Daughters	1.82	2.30	1.88	3.39	1.94	3.39	3.17	3.17
Marital adjustment	*	***	**	***		***	***	***
Sons	1.48	1.19	1.38	1.98	1.34	1.98	2.42	2.42
Daughters	1.66	1.60	1.58	3.44	1.46	3.44	3.39	3.39
Marriage expenses	***	***	***	***	**	***	***	***
Sons	1.67	1.38	1.76	2.11	1.86	2.11	2.49	2.49
Daughters	2.01	1.97	2.31	3.18	2.07	3.18	3.17	3.17
N	**202**	**215**	**161**	**173**	**189**	**173**	**162**	**162**

Source: GDFHS 1998 M=Male F=Female * p<.05 ** p<.01 *** p<.001

Not unexpectedly, the security issue was most important in urban Lahore. Lahore is crowded and is rapidly urbanizing. The population of Lahore City has been growing at 4.5 percent per annum in the last two decades (*Nation* 2000b). Crimes against women have been increasing (RCIW 1997) and general security conditions have been worsening. Therefore, it was expected that people in urban Lahore would feel more insecure than

people at other survey sites, although special security concerns have also been noted with respect to the rural Lahore site.

In summary, respondents in general show more concern for their sons' than their daughters' education and employment. Among female respondents from all survey sites, greater concern for boys' morality, straying, drug abuse, and health are evident from comparative mean scores. Male respondents at all survey sites also showed greater concern for boys in respect of these life aspects, but differentials were not statistically significant. An exception was that male respondents in rural Lahore were significantly more concerned about the possibility of boys than girls straying. People, and especially women, are much more concerned about various aspects of the marriages of their daughters. Security is a major issue in urban Lahore, and people showed more concern for the religious education of daughters than for that of sons. People want to inculcate traditional values in females through religious education, because women have to socialize their children.

5.8 Gender Equity

The totality of gender differences apparent in an examination of variables like preferred sex of children, education, age at marriage, major concerns about boys and girls, and religiosity signifies the low social status of women. These gender differences are not the result of biological differences between males and females. They are the direct result of gender systems within which both males and females live.

Gender difference is a neutral concept and does not inherently imply any social bias against or in favour of one sex or the other. However, reported gender differences in sex preference, education, age at marriage, concerns about sons and daughters, etc. are consistently unfavourable to females. They did not emerge automatically. Rather, they are the product of pervasive gender inequity. The patriarchal social system in Pakistan is biased against females, which is evident from son preference and the differential education levels of males and females.

The high profile Report of the Commission of Inquiry for Women headed by a serving judge of the Supreme Court of Pakistan summarized the socio-legal status of women as follows (RCIW 1997:v):

> The unanimity of view in the Senate (of Pakistan) on the need for a renewed inquiry into the status of women's rights reflected a common acknowledgement that there was explicit and implicit discrimination against women in the existing laws, which affected their rights, living conditions and social status. It was apparent that recent years had not seen any perceptible improvement in the situation of women. While there may have been some marginal gains in some areas, there had in fact been a downslide in others, or at best a status quo. Controversial discriminatory legislation had remained on the statute books, with increasingly damaging implications for women; no new reform law had been enacted, barring a few amendments; non-enforcement and violation of laws relatively beneficial to women had continued; and alarming new areas of concern had emerged.

The appearance of such a report at the highest level of government is encouraging and provides promise for enhancing the status of women in Pakistan. However, the report alludes to its own likely fate in another paragraph (page v):

> There have already been three major inquiries of varying scopes since independence, and although each marked a significant step forward in its examination of the prevalent conditions and the recommendations it made, their recommendations were neither sufficiently incorporated into laws or policies, nor enforced in the few cases where they were so incorporated. The status quo was so strongly entrenched and the political will insufficient for even partial success in meeting their intended objectives.

These findings suggest that Pakistan's functional socio-legal system has been biased against females. Female social disadvantage is reported to have increased in the last two decades (RCIW 1997, HRW 1999). Rather than promoting gender equity, the socio-legal systems propped up new inequities between males and females. For example, acquisition of justice by women became more difficult because an inequitable burden of proof was imposed on women in legal proceedings (RCIW 1997). These systemic and structural gender inequities are likely to have an adverse effect on the health and welfare of females for a long time. Unless these gender equity issues are addressed up front and appropriately, women may be marginalized even further, resulting in the continuation of a gender oppressive system in Pakistan.

Gender inequities appear to have increased in recent years, but they are deeply rooted in local socio-cultural systems. Table 5.22 shows gender-related sayings or

comments noted during the field survey. These sayings provide powerful evidence of socio-cultural biases against females, and cover several aspects of people's lives.

Son preference is evident from the significance of their role in the family lineage, and from daughters being guests in their parents' homes. Sons bring prestige to mothers, and the marriage of daughters is at the forefront of all the concerns. The low status of females is evident from their being equated with footwear or slaves.

The economic burden of females is evident from the powerful question: "God, if you give us daughters, why do you not also give us wealth?" They are considered an economic burden right from birth, when "a daughter demands (needs) two items of clothing". Another saying puts it this way: "A son will earn but a daughter will only eat (consume)". Daughters are considered a source of psycho-social pressure. People seem to be concerned about their future lives because associated problems could create trouble for parents. One saying is: "Due to daughters' uncertain fate, they (daughters) are a source of fear and pain." Another saying is: "Daughters are a burden, like a heavy stone on one's chest".

The economic burden daughters impose is important, but even after marriage they remain a source of stress. "Even daughters who have been married off keep their parents under stress, like a continuous punishment." Healthcare biases against females are evident from the social belief that "Girls are robust, they do not die easily." This probably is one of the major reasons for greater delay in seeking health care for daughters than for sons. Another saying also alludes to health care discrimination: "If a woman is ill, her in-laws allege she is pretending."

The above discussion of socio-cultural beliefs shows that females are socially disadvantaged and discriminated against. These social beliefs are so ingrained in the Pakistani social system that people, in general, do not notice them. Most people consider these gender biases to be normal and socially approved.

Along with the many sayings capturing prevalent biases against females, some were also encountered which glorified the female sex. "Heaven is under a mother's feet" was the most powerful one, and many people appear to believe this and duly pay respect to mothers. It provides great satisfaction to many women. It is also said: "A daughter is a gift of God."

Table 5.22 Gender-related Sayings (Comments) noted during the field survey	
In disfavour of females	
English	Punjabi (Local language)
Son Preference	
Sons carry the lineage.	منڈیاں توں ہندے ولیں چلدا۔
Daughters are guests, they belong to somebody else.	کڑیاں پردھنیاں نیں! اے تے بیگانہ مال نیں۔
Parents of girls are unfortunate and those of boys are fortunate.	کڑیاں والے لوترے تے منڈیاں والے بیوترے۔
A son brings social prestige to his mother.	پتر نال ماں دی عزت ہوندی اے۔
A boy is a cherished offspring.	منڈا تے ترسیاں دی لولاد ہوندی اے۔
A storm (daughter) will be followed by rain (son).	ہنیری آئے گی تے مینہ وی آئے گا۔
Alas! Several daughters! From where will I find husbands?	ترٹھ اکڑیں وا رشتے کتھوں لیاواں۔
The presence of girls casts a shadow on the household.	کڑی ہوے تے کھار وچ پا پے جاندی اے۔
General	
Daughters are a dirty sex (referring to menstruation and childbearing).	کڑیاں والے تے گندای ہوا اے۔
A wife is equivalent to an item of footwear.	بیوی پیر دی جوتی اے۔
A woman is like a slave.	زنانی تے باندی اے۔
A woman walking alone in public does not look good.	زنانی کلی جاندی چنگی نہیں لگدی۔
A woman is mute, she will do what you tell her to do.	کڑی دے بے زبان ہوندی اے جتھے آکھو گے لگ جائے گی۔
Economic	
God if you give us daughters, why do you not also give us wealth?	دھیاں دیتیاں تے کیوں نہ دتا مال مالکا۔
At birth, a daughter demands (needs) two items of clothing.	دھی جمدی دو کپڑے منگدی۔
Daughters are an economic burden from birth, and later also become a source of psycho-social pressure.	دھیاں پہلے کھائدیاں رونیاں فیر کھائدیاں ہونیاں۔

Continued over page

A son will earn but a daughter will only eat (consume).	منڈا ہوئے گا تے کمائے گا کڑی ہوئے گی تے کھائے گی۔
Money spent on girls goes to waste, that spent on boys is an investment.	دھیاں دا کھاوا ریت وچ تے منڈیاں دا کھاوا کھیت وچ۔
Daughters are a burden, marry them off sooner rather than later.	دھیاں بوجھ نیں ایناں نوں جلدی لاہ دیو۔
Psycho-social pressure	
Daughters are a burden, like a heavy stone on one's chest.	دھیاں وڈی پتھر وانگوں سینے تے رہندیاں نیں۔
Due to daughters' uncertain fate, they are a source of continuous fear and pain.	دھیاں دے مقدراں توں ڈر لگدا۔
Pressure is reduced when a daughter is married off.	دھی ونجھوں لہے جائے تے چنگا اے۔
Daughters keep you anxious all the time.	دھیاں تاہنے چڑھائے رکھدیاں نیں۔
A daughter's death feels like a potential source of stress is gone.	دھی مری تے بلا گئی۔
Even daughters who have been married off keep their parents under stress, like a continuous punishment.	کڑیاں اپنے گھر دی چلیاں جان تے پریشان کردیاں نیں جس طرحاں کوئی سزا ہووے۔
Health	
Girls are robust, they do not die easily.	کڑیاں دا ہڈ بڑی نیں اے نیں جلدی مردیاں۔
A dead girl is a good omen but a boy's death is bad.	کڑی مرے تے قسمت۔ منڈا مرے تے بد قسمت۔
If a woman is ill, her in-laws allege she is pretending.	اگر زنانی بیمار ہووے تے سورے کہندے نیں سکر لاری اے۔
In favour of females	
Heaven is under a mother's feet.	ماں دے پیراں تھلے جنت اے۔
A daughter is a gift of God.	دھی تے اللہ دی رحمت اے۔
This daughter is virtuous because she led her brother(s) into the world.	اے کڑی تے بھراواں دی باہ پھڑ کے لیائی اے۔
Daughters always support their parents (socio psychologically), but sons don't.	دھیاں تے ہمیشہ ساتھ دیندیاں نیں۔ پتراں وچھڑ جاندے نیں۔
A daughter is a virtue and is prayed for.	دھی رحمت اے دعاواں وچ منگی جاندی اے۔

Daughters are appreciated because they provide psycho-social support to their parents: "Daughters always support their parents, but sons don't." These sayings favourable to females suggest that people accept daughters with some reluctance, but sons are readily wished and prayed for.

5.9 Conclusions

Female social status has traditionally been low in Pakistan and son preference is pervasive. Females are generally at a disadvantage when it comes to parental investment in their children. They are costly economically and a burden socially. For example, dowries and wedding expenses are significant economic costs, and daughters' protection is a constant imposition on parents. Table 5.22 in this chapter showed gender-based sayings or comments which constitute powerful evidence of socio-cultural biases against females. These culturally ingrained biases are at the heart of socio-economic biases against females in Pakistan. During the last two decades, poverty and social inequalities in Pakistan have increased. Poverty is known to affect socially disadvantaged groups like females more adversely than advantaged ones. Secondly, the changing Pakistani social environment has had an adverse effect on gender structures.

People are very concerned about the futures of their daughters because of their being potential trouble for parents throughout their lives, even after marriage. Parents have to meet growing demands for dowry and increasing costs for wedding ceremonies. Security and protection of females have become a serious social issue. In such a social environment, gender differences have widened, gender inequalities have grown and improvement in female social status appears to have suffered a setback.

Chapter 6

Gender and Other Differentials in Self-assessed Health

6.1 Introduction

Gender equity in health is a topic of continuing debate which highlights the complex interactions between gender and health (Doyal 2000). Gender differences in health in Pakistan are generally associated with poorer female than male health (Midhet et al. 1998, Tinker 1998, WHO 1998). Large proportions of women are anaemic and malnourished (Mahmood and Nayab 1998) and most Pakistani women suffer psychological problems (WHO 1998). Both physical and psychological ailments are bad for human well-being, but psycho-physical ailments are more enduring and debilitating (Heise 1994, Heise et al. 1994). In this chapter psycho-physical health is examined by focusing on self-reports of respondents' health. Respondents were asked to rate their health status in five categories, 'very good', 'good', 'fair', 'sometimes good and sometimes poor', and 'poor'. Self-assessed health combines both psycho-social and physical health, and the analysis is focused on the determinants of gender, urban-rural, and regional differentials in health in the selected Lahore and Bahawalnagar field sites.

6.2 Measurement of Health

Measurement of health is a complex issue, which is reflected by the fact that there is no consensus on the definition of health. The process of health status measurement is "so involved with subjective perceptions, social expectations and role demands, and value judgments that it is extremely difficult to translate it into any set of empirical measures" (Mechanic 1978:183). According to a widely recognized definition of health adopted by the World Health Organization, health is a state of physical, mental, and social well-being, and not merely the absence of disease or infirmity. Within this broad definition, health can be scaled using objective measures like pathological entities of disease or through more subjective measures like self-reported health status. Clinical measures of illness not only are difficult and costly to obtain in household surveys, but also lack the

capacity to capture the elements of mental and social well-being recognized in the WHO definition.

Self-perceived health status varies according to individual characteristics like education and income. For example, low-income people are more likely to assess their health as 'fair-to-poor' than their high-income counterparts. Geographic variables like region and urban-rural residence are also linked with differentials in perceived health status (Pampalon et al. 1999). Despite socio-cultural doubts attaching to the efficacy of self-assessed health, personally reported health continues to be a widely used indicator of individuals' health status (Segovia et al. 1989, Marmot et al. 1997, Lahelma et al. 1999, Kawachi et al. 1999). Poor perceived health status has been shown to predict mortality (Mossey and Shapiro 1982, Idler and Angel 1990, Idler and Benyamini 1997) and is closely associated with morbidity (Mays et al. 1992).

Self-assessed health status is important because people's health-related behaviours, like the use of health services, are dependent upon their own definitions of health and illness (Linn et al. 1980, Winberger et al. 1986, Connely et al. 1989). In short, self-assessed health, being a subjective measure, is likely to incorporate physical and psycho-social aspects of health (Idler and Angel 1990). Although the subjective measure of self-assessed health is not precise enough to reflect every dimension of health some of the more complex indices of health capture, it continues to be an 'adequate' and 'powerful' measure of health (Pampalon et al. 1999:1483).

Self-reports of health are a widely gathered type of data in health surveys in developed societies (Bullinger 1997) and are increasingly used in poor countries. There are several sources of error associated with self-assessed health status, "most of which can be grouped under the rubric, 'response artifacts'" (Diener et al. 1991). These sources of error are located within the testing situation; i.e., the mood of respondents at the time of interview, or the way the question was asked. The efficacy of self-reports of health can be questioned in poor countries because of pervasive infectious diseases and the overall low quality of life. Nevertheless, results from such data are continually used with some confidence in both developed and developing countries (Kunst et al. 1995, PMRC 1995). It is possible that self-assessed health may actually be a better measure of physical health status in poor countries than in developed ones.

The examination of respondents' self-reported health statuses in the present study is based on a broad question, 'How is your health in general?' There were five structured responses: 'very good', 'good', 'fair', 'sometimes good and sometimes poor', and 'poor'. Analysis generally has been undertaken by focusing on the frequency with which respondents classified themselves to categories 3-5; i.e., the frequency with which they rated their health 'fair-to-poor'.

6.3 Self-assessed Health and Long-standing Illness

The efficacy of self-assessed health as a measure of health may be gauged from Table 6.1. This shows proportions of respondents reporting 'very good-to-good' and 'fair-to-poor' health who also reported a long-standing illness, by region, urban-rural residence and gender. In total, among respondents who rated their health 'fair-to-poor', 53 percent reported some sort of long-standing illness compared to only nine percent of those who rated their health 'very good-to-good' ($p<.001$). The association between self-reported health status and long-standing illness is statistically significant for all groups of respondents at all survey sites ($p<.001$). This is in line with previous findings showing a strong correlation between self-assessed health and morbidity (Larue et al. 1979, Mays et al. 1992).

Table 6.1 Proportions of respondents reporting a long-standing illness by self-assessed health status, region, urban-rural residence and gender

	Lahore				**Bahawalnagar**			
	Urban		**Rural**		**Urban**		**Rural**	
Self-assessed health status	M	F	M	F	M	F	M	F
	***	***	***	***	***	***	***	***
'Very good-to-good'	.10	.11	.07	.04	.14	.04	.09	.03
N	**170**	**76**	**115**	**24**	**195**	**127**	**192**	**72**
'Fair-to-poor'	.67	.51	.76	.67	.48	.36	.55	.25
N	**97**	**177**	**82**	**110**	**33**	**86**	**40**	**115**

Source: GDFHS 1998 M=Male F=Female * p<.05 ** p<.01*** p<.001

6.4 Geographic Health Differentials

Perhaps the single greatest achievement of the modern world has been a reduction in death rates nearly everywhere and probably also a very substantial increase in the proportion of the world's inhabitants who feel really well most of the time. ... Yet that achievement has not yet meant good health for all (Caldwell 1990b:xi).

This statement implies the existence of health disparities among populations, including regional, urban-rural, and gender-based inequalities. Variations in geographic conditions cover psychological, social, cultural, structural, and environmental domains, and as a result the health statuses of communities vary (Goodman et al. 1996, Midhet et al. 1998, Pampalon et al. 1999, Rosenberg and Wilson 2000). To compare health status among male and female respondents from the four survey sites, the subjective health measure described in Section 6.2 is used.

Among respondents in all four survey sites combined, 43 percent reported their health status as 'fair-to-poor'. Although not nationally representative, this figure is broadly suggestive of significantly more poor health in Pakistan than in a developed country like Canada, where a mere 11 percent of people in Quebec Province reported their health as'fair-to-poor' in 1992-93 (Pampalon et al. 1999:1485).

Table 6.2 Proportions of respondents reporting 'fair-to-poor' health by region and urban-rural residence

	Lahore		Bahawalnagar	
	Urban	Rural	Urban	Rural
			**	
	.52	.57	.27	.37
N	**526**	**339**	**442**	**421**

Source: GDFHS 1998 * p<.05 ** p<.01*** p<.001

An enormous inter-district difference in self-reported health indicates regional variability. In Lahore District more than one-half (54 percent) of all respondents reported their health as 'fair-to-poor' compared with one-third (32 percent) of respondents in Bahawalnagar District. Table 6.2 shows proportions of respondents reporting 'fair-to-poor' health by region and urban-rural residence. Significant differentials in the health

statuses of urban and rural populations have been observed (Rahman 1980, Malik 1992, Sathar and Mason 1993). The data show that 52 percent of respondents from urban Lahore and a slightly larger, but not significantly larger, proportion of respondents from rural Lahore (57 percent) rated their health 'fair-to-poor'. In rural areas, poverty is pervasive and health care facilities are scarce. On the other hand, psycho-social pressures are expected to be greater in urban centres than in rural areas owing to urbanization, crowding and pollution.

In Bahawalnagar, 27 percent of urban and 37 percent of rural respondents rated their health 'fair-to-poor' ($p<.01$). Poverty is widespread in rural Bahawalnagar and villages are small and scattered, with few health care facilities. Unlike Lahore City, urban Bahawalnagar is small, crowding is minimal and only about one-fourth of respondents rated their health 'fair-to-poor' compared with over one-half in urban Lahore ($p<.001$).

Urbanization and industrialization coupled with pollution contribute towards psycho-social ailments. Lahore District is predominantly urbanized (83 percent) and is densely populated (3506 persons/km^2). The adjacent rural areas have a substantial urban influence. On the other hand, Bahawalnagar District is sparsely populated (229 persons/sq. km^2) and mostly rural (81 percent) (Government of Pakistan 1998b). Urban-rural transport and communications in Bahawalnagar are poorer than in Lahore. Health facilities in rural Bahawalnagar are scarce, whereas much better health services are available in and around rural Lahore. In 1998, there were 67 health care providers per 10,000 population in Lahore compared with only 14 per 10,000 in Bahawalnagar (Government of Punjab 1998).

6.5 Gender Differences in Self-assessed Health

Globally, health and illness are gendered phenomena (Broom 1995, Kishor 1995, Fuhrer et al. 1999, Ahmed et al. 2000, Lane and Cibula 2000). Women worldwide live longer, but a greater proportion of their lives than of men's is burdened with illness. Men, on the other hand, suffer less sickness, but their illness episodes are more severe: for example, cardio-vascular problems, a major cause of death. Although gender differences in types of illness are important, women tend to experience more ill-health for longer periods of time. According to Lahelma et al. (1999:8), in developed countries "the

advantage of women living longer than men is partly shadowed by the fact that the proportion with ill-health is higher among women than men". Moreover, psycho-physical health problems are more enduring and debilitating for females than males (Heise et al.1994).

The longer periods of ill-health experienced by women are an important dimension of health, as they point towards a gender difference in overall quality of life (Kronenfeild 1999, Lahelma et al. 1999). This is critically important in poor countries, where the sufferings of women are aggravated by a lack of adequate health services, especially reproductive care (Puentes-Markides 1992, Khan et al. 1994, Ruck et al. 1999). Pakistan is a high-fertility country (Ali et al. 1993, Caldwell 1995, Hakim and Miller 1996): according to the 1996-97 PFFPS, during 1992-96 the TFR was 5.36 children per woman, so that large proportions of women's lives are spent either pregnant or lactating. Therefore, the lack of health services affects the health of women more adversely than that of men (ICRW 1989, Puentes-Markides 1992, Janjua 1996, Technical Assistance Design Team 1996).

In line with international trends, a higher proportion of women than of men in the present study reported 'fair-to-poor' health. Among the combined total of respondents from the four survey sites, 62 percent of female and 27 percent of male respondents reported 'fair-to-poor' health. Table 6.3 shows proportions of respondents reporting 'fair-to-poor' health by region, urban-rural residence and gender. In urban Lahore, 70 percent of women and 36 percent of men rated their health 'fair-to-poor' ($p<.001$). The corresponding figures in rural Lahore were 82 percent and 41 percent respectively ($p<.001$). Similarly, significant gender differentials in self-assessed health were reported in urban and rural Bahawalnagar.

The urban-rural difference in male self-reports of health status as 'fair-to-poor' in Lahore district was not statistically significant, whereas the female difference was ($p<.05$). Similarly in Bahawalnagar, the male difference was not significant whereas the female difference was ($p<.001$). These comparisons suggest that urban-rural residence does not affect the health of men nearly as much as it does that of women. This is understandable in the context of the sex-segregated culture of Pakistan. In rural areas women are constrained from going out of their villages for various personal needs, including health care. On the other hand, men do not face such mobility constraints, and

probably that is why there were no significant differences in self-reports of health status between men resident in rural and urban areas of the two districts.

Table 6.3 Proportions of respondents reporting 'fair-to-poor' health by region, urban-rural residence and gender

	Lahore				Bahawalnagar			
	Urban		Rural		Urban		Rural	
	***		***		***		***	
Proportions	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**
'Fair-to-poor'	.36	.70	.41	.82	.14	.40	.17	.61
Female-male ratio	1.94		2.00		2.86		3.59	
N	**273**	**253**	**205**	**134**	**229**	**213**	**234**	**187**

Source: GDFHS 1998 M=Male F=Female * p<.05 ** p<.01*** p<.001

In percentage-point terms, rural Bahawalnagar records the highest gender difference (44 percentage points) while urban Bahawalnagar has the lowest (26 percentage points). Differences for the rural and urban areas of Lahore lie between these two figures, 41 and 34 percentage points respectively. Female to male ratios show the maximum gender difference occurring in rural Bahawalnagar, followed by urban Bahawalnagar, rural Lahore and urban Lahore. This gradient is in line with the socio-economic status of respondents from the respective urban and rural areas of the two districts, Lahore being the developed and Bahawalnagar an underdeveloped district.

Lahore exhibits a lower gender difference in self-reports of 'fair-to-poor' health than Bahawalnagar. This suggests that Bahawalnagar women are at a dual health disadvantage in both urban and rural areas, first because of gender, and secondly because of poverty and scarcity of health services. However, it is worth noting that the proportions of urban and rural Bahawalnagar women reporting 'fair-to-poor' health were lower than figures for women in urban and rural Lahore. Higher female-male ratios are primarily due to the very low proportions of men rating their health 'fair-to-poor'. Crowding, pollution, and socio-psychological pressures are part and parcel of city life, and rural populations do not have to face these health-damaging circumstances. Although rural Bahawalnagar women in particular were faced with poverty and a lack of health resources, they did not have to confront city pressures.

With reference to the high proportion of women reporting 'fair-to-poor' health in rural Lahore, this survey site was adjacent to an industrial zone where some local women worked in vegetable packing factories. Men in the village did not like this, and on account of it the local social structure had experienced gender destabilization, and women faced violence. A greater proportion of women in rural Lahore (37 percent, which is 48 percent more than at any other site) admitted physical abuse by their husbands. In a local focus group discussion with men, a participant said: "I consider earnings of women *haraam* (morally wrong)". Such gender conditions may have affected women's health adversely.

6.6 Determinants of Health Differences

The different health status levels of various population groups emerge through social processes. Structures of social inequality and contextual behaviours either promote or damage health (Denton and Walters 1999). Relevant social structures and personal attributes embrace biology, psychology, personality, and social environment (Marmot et al. 1984). They act independently and through complex interactions with each other to produce health differences among populations. For example, the female-male difference in health is widened by the low social status of women and their reproductive function. Women experience mobility constraints in sex-segregated cultures that men do not and these constraints influence comparative health seeking opportunities for females and males.

At a personal level, income, occupation, sex, age, social support, stress, feelings of control, mastery of environment, and behaviours such as diet and physical activity have all been linked with inequalities in health (Denton and Walters 1999). In poor countries, access to and use of health services is another important determinant of health inequalities. But all these variables are themselves influenced by local socio-cultural processes. The relationship between these social processes and health is important to understanding the dynamics of population-based health inequalities (ICRW 1989, Acsadi and Johnson-Acsadi 1990, Khan et al. 2000).

Gender inequalities in health "emerge from social interaction and social status, in complex interplay with biology, genetic inheritance, hormones and physiology" (Lorber cited in Lahelma et al. 1999:9). These determinants are so intertwined that their

individual contributions towards health and illness are difficult to discern. Although the contribution of biological attributes towards male-female inequalities in health cannot be questioned, their overall significance has been challenged (Verbrugge 1989).

In the present study 62 percent of women and only 27 percent of men reported their health as 'fair-to-poor'. This huge gender difference cannot be explained with the bio-medical model which generally dominates in government circles in Pakistan alone, although a shift from curative to primary and preventive health care is occurring (World Bank 1989, NIPS 1992). A substantial part of it may be explained by socio-cultural variables (World Bank 1996, Turner 1999).

Behavioural determinants like smoking, drinking, diet, and physical activity are likely to contribute towards gender inequalities in health. For example, men tend to smoke and drink more than women do, and they are inclined to eat less healthy foods as well (Prattala et al. 1994). Gender roles have also been associated with gender differences in health (Lindsey 1994, Macran et al. 1996). Multiple roles as an employee, a spouse and a mother (or father) have been examined as determinants of gender inequalities in health. However, there are contrasting views on the contribution of multiple roles. It has been argued on the one hand that having several rewarding roles promotes health, whereas on the other it has been claimed that a multiplicity of roles produces health damaging role strain (Bartley et al. 1999). In a poor country like Pakistan multiple roles, such as wife, mother, housekeeper, carer, labourer or farm worker, and office worker all take a toll on women's limited energy, and are likely to influence their health negatively (Santow 1995).

In summary, psychology, behaviour and environment all contribute towards health inequalities, but these health determinants are influenced by local social conditions. The following sections will examine some of these behavioural correlates of self-assessed health. Regional, urban-rural, and gender differences in self-reported health will be examined in relation to variables like education, age, occupation, income, caste, type of health care provider, and a set of variables related to family structure like gender composition of children. The analysis also includes variables like women's decision making autonomy, freedom of mobility, and security.

6.6.1 Education

"Children usually have a greater chance of survival when they are born to an uneducated mother in a highly educated society, than when they are born to an uneducated mother in largely uneducated society" (Caldwell 1989:534). This statement infers that macro-level social factors are more important than behavioural factors in determining health. However, most socio-cultural models in health research tend to focus on personal behaviours rather than exploring the cultural contexts constraining human choices and shaping health behaviours (Macintyre and Hunt 1997).

In general, research seems to indicate that education promotes health by producing healthy behaviours (LeVine et al. 1991, Ibraz and Fatima 1993, Raghupathy 1996), but the effect of schooling on health varies in different social settings. Ambient social conditions are a major determinant of health inequalities (Macintyre and Hunt 1997), so that education may substantially contribute towards good health in one social environment but may not be so important in another.

Table 6.4 shows proportions of respondents reporting 'fair-to-poor' health by education, region, urban-rural residence and gender. The data suggest consistently poorer, though not always significantly poorer, self-reported health status among uneducated respondents. The effect of education on self-assessed health appears to be greater in Bahawalnagar than in Lahore. For example, among urban male respondents in Bahawalnagar, the proportion of uneducated men who reported 'fair-to-poor' health was more than double that of those who had some education ($p<.05$). On the other hand, in urban Lahore the proportion of uneducated men who reported 'fair-to-poor' health was only 31 percent greater than among their educated counterparts.

Among female respondents in urban Bahawalnagar, 49 percent of uneducated women reported 'fair-to-poor' health and this proportion declined by 37 percent for their educated counterparts ($p<.05$). The corresponding decline due to education for Lahore urban women was only four percent. A similar positive effect of education on self-assessed health may be observed among rural female respondents in the two districts. However, among male respondents in rural Bahawalnagar, the effect of education is less marked (statistically not significant) than among men in rural Lahore ($p<.05$) (Table 6.4).

Table 6.4 Proportions of respondents reporting 'fair-to-poor' health by schooling, region, urban-rural residence and gender

	Lahore				Bahawalnagar			
	Urban		Rural		Urban		Rural	
Education	**M**	**F**	**M** *	**F** **	**M** *	**F** *	**M**	**F** *
Uneducated	.46	.72	.48	.87	.21	.49	.19	.64
N	**35**	**60**	**106**	**107**	**85**	**111**	**161**	**173**
Educated	.35	.69	.33	.63	.10	.31	.14	.36
N	**238**	**193**	**99**	**27**	**144**	**102**	**73**	**14**

Source: GDFHS 1998 M=Male F=Female * p<.05 ** p<.01*** p<.001

The effect of education on health is influenced by gender (Williamson and Boehmer 1997). Education seems to have a greater effect on women's health than on men's. Its effect on the of women was statistically significant at three survey sites, but its effect on men's health was significant at only two sites. In the Pakistani patriarchal culture the role of education in women's lives is important, but is limited by structural conditions. The vast majority of both educated and uneducated women are housewives, and the capacity of education to bring substantial change in many women's lives is consequently limited. In a focus group discussion with women in urban Bahawalnagar, a woman said: "A girl can have any level of education, but she has to do housekeeping". Similarly, in another focus group discussion with women in urban Lahore, a participant said: "A girl may have high education, but she still has to be subservient to her husband". On the other hand, men's education brings substantial change in their occupations and incomes.

In rural Bahawalnagar, however, the educational effect on women's health was more positive than it was on men's health. The proportion reporting 'fair-to-poor' health among educated women in rural Bahawalnagar was 44 percent lower than among women with no schooling ($p<.05$). The corresponding educational improvement in self-reported health for men in rural Bahawalnagar was 26 percent. The probable reason for this lies in extreme poverty in rural Bahawalnagar. Even safe drinkable water is not available in some of the villages of Bahawalnagar. Women's education may have contributed to better

use of available health-related resources like water, and to adoption of healthier personal hygiene practices.

In summary, education seems to affect the perceived health status of all respondents positively, but the intensity of the relationship varies among the four survey sites and between men and women. Among only five of the eight groups of respondents was there a statistically significant relationship between education and self-reported health. However, the associations of education with self-assessed health among men and women in urban Lahore and male respondents in rural Bahawalnagar were in the same positive direction. Education seems to have a slightly more positive effect on the self-assessed health of women than of men.

6.6.2 Occupation

Occupation contributes to morbidity and ailments among men and women (Emslie et al. 1999, Fuhrer et al. 1999, Hemstrom 1999). Table 6.5 shows proportions of respondents reporting 'fair-to-poor' health by occupation, region, urban-rural residence and gender. The major occupation categories of men were white-collar workers, self-employed, skilled and unskilled workers, and a range of 'Other' occupations. White-collar workers included government and private employees. Self-employed were small business men, land owner-cultivators, and shopkeepers. Skilled workers comprised masons, carpenters, tailors, cobblers, and ironsmiths. Unskilled workers included construction labourers and peasants. The category 'Other' contained unemployed and retired persons, and some other occupations which interviewers could not classify clearly.

Among women the major occupation was housewife at all survey sites. However, in urban Bahawalnagar a substantial proportion of women were school teachers or other white-collar workers. Having a white-collar job seems to have had a positive effect on the self-assessed health of women. In urban Bahawalnagar, 45 percent of housewives compared with only 22 percent of female white-collar workers rated their health 'fair-to-poor' ($p<.05$). Women white-collar workers were educated, and this education may have contributed positively towards their assessments of their health. It is interesting that office or teaching jobs are good for women's health.

Table 6.5 Proportions of respondents reporting 'fair-to-poor' health by occupation, region, urban-rural residence and gender

	Lahore				Bahawalnagar			
	Urban		Rural		Urban		Rural	
Occupation	**M**	**F**	**M** **	**F**	**M**	**F** *	**M**	**F** *
Housewife	NA	.69	NA	.82	NA	.45	NA	.65
N	**NA**	**231**	**NA**	**118**	**NA**	**161**	**NA**	**128**
White-collar workers	.43	1.00	.14	1.00	.15	.22	.23	.00
N	**93**	**6**	**14**	**1**	**53**	**37**	**22**	**5**
Self employed	.27	.00	.27	.00	.12	.00	.14	.00
N	**101**	**1**	**67**	**0**	**81**	**2**	**79**	**1**
Skilled workers	.44	1.00	.42	1.00	.20	.60	.16	.75
N	**59**	**2**	**43**	**1**	**41**	**5**	**31**	**4**
Unskilled workers	.22	00	.56	1.00	.15	00	.17	.68
N	**9**	**0**	**72**	**2**	**46**	**0**	**94**	**25**
Other	.40	.80	.67	.86	.00	00	.38	.55
N	**10**	**5**	**9**	**7**	**5**	**2**	**8**	**20**

Source: GDFHS 1998 M=Male F=Female * p<.05 ** p<.01*** p<.001

Having a white-collar job in rural Lahore seems to have a positive effect on men's health. Among men in rural Lahore, 14 percent of white-collar workers, 27 percent of self-employed, 42 percent of skilled and 56 percent of unskilled workers, and 67 percent of 'Other' men rated their health 'fair-to-poor' ($p<.01$). In rural areas, education is low and very few people attain enough education to find white-collar jobs. Office work is respectable in rural areas and helps raise self-esteem, which may have contributed positively towards self-assessed health.

The occupations of male respondents in urban Lahore did not have a significant association with health, although the self-employed seemed to be healthier. The pattern among men in rural Lahore was different, and white-collar occupations seem to have been health-producing there ($p<.01$). In rural areas, white-collar jobs are considered prestigious owing to their educational requirements, and this may have contributed towards their being associated with better health. By contrast, in large urban centres white-collar

workers are poorly paid and under economic pressure. That is perhaps why three times more white-collar workers from urban than from rural Lahore rated their health 'fair-to-poor' ($p<.01$).

This comparison suggests that the effect of one's job on health depends on the nature of the job and ambient socio-cultural conditions. Among women white-collar jobs are considered respectable and are likely to contribute towards raising their self-esteem. Physical work, on the other hand, is likely to drain the energy of women and is expected to have a negative effect on health. It may be noted that over three times more women were employed in Bahawalnagar than in Lahore. Actually, a small colony of lower level government staff was part of the selected survey site in urban Bahawalnagar, and this will have pushed up the proportion of white-collar workers.

In summary, occupation has a significant effect on the self-assessed health of men and women. However, the direction of influence depends upon allied incomes and the social respect associated with particular occupations in the local socio-cultural system. Hard physical work is likely to damage the health of both men and women, but to affect that of women more, because of their equally heavy domestic responsibilities. The nature of jobs provided to women should be commensurate with socio-cultural conditions and their household responsibilities.

6.6.3 Income

Income is an important constituent of people's socio-economic position and is strongly associated with health (Marmot et al. 1997). The socio-economic disadvantage of women influences their health negatively (Defo 1997). In general, poor health is concentrated among the most deprived sections of a population, and a Canadian study showed that low-income people were three times more likely to report their health as 'fair-to-poor' than those having high-income (Pampalon et al. 1999). However, other literature emphasizes broader social conditions more (Denton and Walters 1999). In other words, deprivation does influence health negatively (Knowles 1979, Doorslaer 1997, Judge et al. 1998, Lynch 2000), but overall social environments have a more potent influence on people's self-assessed health.

The health of the poor suffers though both deprivation and unequal social structures, while the health of the well-off is influenced only by social factors. In

Pakistan, the distribution of health services is highly skewed and mostly concentrated in large cities. Government health care facilities are available in both urban and rural areas, but only one-fifth of Pakistanis used government health care services in 1994 (PMRC 1995), and owing the high cost of private health care, many poor people do not make adequate use of health services. This skewed provision of health care across geographical areas has produced different patterns of health among different groups of people.

Table 6.6 shows proportions of respondents reporting 'fair-to-poor' health by household monthly income, age of respondent, urban-rural residence and gender. Among respondents aged under 45 years, slightly larger proportions of low-income respondents reported their health as 'fair-to-poor'. The exception was men in urban and rural Lahore, who did not show any income differential in self-assessed health status, while the other income differentials were not statistically significant. Among women in rural Bahawalnagar, however, one-third of high-income and three-fifths of low-income women reported 'fair-to-poor' health ($p<.05$).

Table 6.6 Proportions of respondents reporting 'fair-to-poor' health by household monthly income, age of respondent, region, urban-rural residence and gender

	Lahore				Bahawalnagar			
	Urban		Rural		Urban		Rural	
Income	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**
				<45 years				
<Rs5000	.22	.68	.29	.84	.13	.36	.09	.61
N	**50**	**56**	**111**	**81**	**128**	**90**	**118**	**119**
5000+	.22	.64	.29	.62	.00	.30	.00	.32
N	**88**	**108**	7	**13**	**20**	**70**	**4**	**19**
				45+ years				
<Rs5000	.38	.75	.63	.85	.17	.75	.23	.80
N	**29**	**20**	**59**	**26**	**47**	**20**	**92**	**35**
5000+	.55	.80	.46	.86	.26	.55	.40	64
N	**106**	**69**	**28**	**14**	**34**	**31**	**20**	**14**

Source: GDFHS 1998 M=Male F=Female * $p<.05$ ** $p<.01$ *** $p<.001$

Income appears to influence the health of rural females more positively than that of males. For example, among those aged <45 years, 84 percent of low-income and 62 percent of high-income women in rural Lahore reported their health as 'fair-to-poor' compared to equal proportions of high and low-income male respondents. The corresponding figures for rural Bahawalnagar were 61 percent and 32 percent ($p<.05$). Although the former differential is not statistically significant, probably owing to small numbers, it indicates a positive effect of income on the health of women. Men in Pakistan are generally the breadwinners (Lyon and Fischer 1997) and have to face the hardships of earning a livelihood. On the other hand, women from well-off families generally stay home and enjoy the material comforts and social prestige a high-income brings. They can buy quality health services and housemaids for personal and home care.

6.6.4 Caste

Socio-cultural factors contribute towards health and illness (Basu 1990, Caldwell 1990a, Johansson 1991). Caste is an important social stratifier in South Asia and is expected to influence health. Among the so-called martial castes of North India and Pakistan, 'fierce patriarchy' is reported to have an influence on low female-male sex ratios (Dreze and Khera 2000). In this study, however, caste, in general, did not show any significant association with self-assessed health status. Differentials in health among six major caste groups were not statistically significant. 'Rajput', including allied castes, was the major caste group in both districts. Proportions of respondents from some castes were often relatively small. For example, the Kashmiri caste was found in urban Lahore but was virtually non-existent elsewhere. Table 6.7 shows proportions of respondents reporting 'fair-to-poor' health by caste, region, urban-rural residence and gender.

Among men at all survey sites, slightly larger proportions of Rajput and allied caste than Arain caste members rated their health 'fair-to-poor'. For example, in urban Lahore 27 percent of Arain and 35 percent of Rajput and allied castes assessed their health as 'fair-to-poor'. In rural Lahore, the corresponding figures were 32 percent and 38 percent. However, matching differentials in self-assessed health among women differed from those among men. For example, in urban Lahore identical proportions of women from the Arain and Rajput caste groups rated their health 'fair-to-poor'.

Table 6.7 Proportions of respondents reporting 'fair-to-poor' health by caste, region, urban-rural residence and gender

	Lahore				Bahawalnagar			
	Urban		Rural		Urban		Rural	
Caste	**M**	**F**	**M**	**F**	**M**	**F** **	**M**	**F**
Kashmiri	.36	.59	.67	1.00	.00	.00	.00	.00
N	**28**	**39**	**3**	**2**	**1**	**1**	**0**	**1**
Arain	.27	.69	.32	.88	.00	.24	.14	.74
N	**37**	**26**	**28**	**32**	**20**	**55**	**35**	**31**
Rajput & allied castes	.35	.69	.38	.78	.17	.49	.16	.58
N	**109**	**114**	**86**	**54**	**138**	**93**	**85**	**77**
Sheikh	.55	.77	.00	.83	.25	.67	.17	.63
N	**33**	**26**	**4**	**6**	**12**	**12**	**6**	**8**
Syed	.52	.76	.50	.67	.00	.43	.50	1.00
N	**21**	**17**	**12**	**6**	**2**	**7**	**4**	**1**
Occupational castes	.00	.00	.29	.93	.50	.14	.10	.71
N	**1**	**0**	**17**	**14**	**2**	**14**	**10**	**24**
Others	.27	.67	.53	.80	.11	.45	.18	.54
N	**44**	**31**	**55**	**20**	**54**	**31**	**94**	**46**

Source: GDFHS 1998 M=Male F=Female * p<.05 ** p<.01 *** p<.001

Among women in rural Lahore, 88 percent of Arain and 78 percent of Rajput and allied castes reported their health as 'fair-to-poor'. In urban Bahawalnagar, 17 percent of Rajput and allied caste men compared to none of the Arain men rated their health as 'fair-to-poor' ($p<.05$). Similarly, in rural Bahawalnagar 74 percent of Arain and 58 percent of Rajput and allied caste women rated their health 'fair-to-poor'. These findings suggest that Arain men and Rajput women have better self-assessed health. Among women in urban Bahawalnagar, more than double the proportion of Rajput compared to Arain women reported 'fair-to-poor' health. This finding is the result of higher education and white-collar employment among Arain women in urban Bahawalnagar. About three-fifths of

Arain women interviewed at that survey site were educated, compared to only one-third of Rajput women. Similarly, one-third of Arain women in urban Bahawalnagar were white-collar workers compared to one-fourth of Rajput women.

6.6.5 Age

Age differences in health are as complex as regional and gender differences. Age shapes people's perceptions about health. At older ages people tend to accept some symptoms of illness as to be expected. Physical health deteriorates with age, but stressful factors often fade away as people grow old. Age is reported to have a strong association with chronic illness (D'Arcy 1987) and variation in health within a single age group is stratified by socio-economic position of people (House 1997), while psycho-social problems are reported mainly by people in their 30s and 40s (Denton and Walters 1999). "It has become accepted wisdom that 'men die and women become disabled'" (Arber and Cooper 1999:61). In short, age is a key variable in shaping health and illness responses of both men and women.

Table 6.8 shows proportions of respondents reporting 'fair-to-poor' health by age, region, urban-rural residence and gender. Among all respondents from all four survey sites combined, age was strongly associated with self-reported health. Thirty-five percent of those aged under 35 years reported 'fair-to-poor' health compared to 39, 49 and 69 percent of those aged 35-44, 45-54, and 55+ years respectively. These figures show a clear gradient by age of respondents.

The effect of age on self-assessed health was strongest among men in urban Lahore. From among men aged <35 years, only four percent reported 'fair-to-poor' health. The proportion increased sixfold to 26 percent for those aged 35-44 years, then almost doubled to 48 percent at ages 45-54 years, before rising further to 61 percent at ages 55+. Among men in rural Lahore the proportion reporting 'fair-to-poor' health rose by around 60 percent at each successively older age group (Table 6.8). In both urban and rural Lahore the self-assessed health of men deteriorated rapidly in the middle age groups. A much weaker effect of age on male health was found in urban Bahawalnagar, while in rural Bahawalnagar the relationship was of intermediate strength and marked by a significant difference between those over and under 45 years of age.

Table 6.8 Proportions of respondents reporting 'fair-to-poor' health by age, region, urban-rural residence and gender

	Lahore				Bahawalnagar			
	Urban		Rural		Urban		Rural	
Age of respondents	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**
	***		***		*	**	**	*
<35	.04	.65	.20	.74	.12	.28	.09	.50
N	**27**	**65**	**30**	**38**	**59**	**69**	**47**	**62**
35-44	.26	.66	.32	.86	.10	.37	.09	.62
N	**111**	**.99**	**88**	**56**	**89**	**91**	**75**	**76**
45-54	.48	.77	.50	.88	.20	.59	.26	.71
N	**102**	**71**	**64**	**26**	**80**	**44**	**96**	**42**
55+	.61	.83	.78	.79	1.00	.86	.25	1.00
N	**33**	**18**	**23**	**14**	**1**	**7**	**16**	**7**

Source: GDFHS 1998 M=Male F=Female * p<.05 ** p<.01*** p<.001

In contrast, among female respondents urban Bahawalnagar exhibited the strongest relationship between age and self-assessed health. The relationship was not statistically significant for females in either urban or rural Lahore, where large proportions of young women (two-thirds or more of those aged <35 years) reported their health as 'fair-to-poor'. These women were at their peak reproductive ages, and despite lower fertility in urban Lahore, may have suffered pregnancy-related ailments or ailments linked to confinement in crowded residential quarters which contributed towards them rating their health 'fair-to-poor'.

6.6.6 Usual Health Care Provider

A variety of health care providers is used in Pakistan. In urban areas, towns and villages, modern health care is available through qualified health care providers. Rural Health Centres, Basic Health Units, and Maternal and Child Health Centres staffed by qualified persons operate in large villages and towns. However, people in both rural and urban areas also frequently use unqualified health care providers like quacks, dispensers, chemists, *hakims* (indigenous doctors), and spiritual healers.

The provision and use of health services have been linked with people's health (Harriss 1989, Ojanuga 1992, Puentes-Markides 1992, Janjua 1996). The vast majority of respondents in urban areas used MBBS (qualified) doctors, but not so those in rural areas (Table 6.9). Substantial numbers of both men and women from rural survey sites used quacks, dispensers, chemists, *hakims* and other healers. Apparently, there is no significant relationship between the type of usual health care provider and self-assessed health.

Table 6.9 shows proportions of respondents reporting 'fair-to-poor' health by usual health care provider, by region, urban-rural residence and gender. In general, slightly lower proportions of respondents who used MBBS health care providers rated their health 'fair-to-poor'. From among those female respondents in rural Lahore who usually consulted an MBBS doctor, 66 percent rated their health 'fair-to-poor' compared with 87 percent of those who used dispensers and chemists ($p<.05$).

Table 6.9 Proportions of respondents reporting 'fair-to-poor' health by usual health care provider, region, urban-rural residence and gender

	Lahore				**Bahawalnagar**			
	Urban		**Rural**		**Urban**		**Rural**	
Type of health care provider	**M**	**F**	**M**	**F***	**M**	**F**	**M**	**F**
MBBS	.37	.67	.37	.66	.14	.39	.14	.57
N	**231**	**169**	**57**	**32**	**174**	**158**	**72**	**68**
Quack	.11	1.00	.34	.89	.33	.25	.16	.54
N	**9**	**3**	**67**	**9**	**15**	**4**	**67**	**26**
Dispenser/Chemist	.40	.67	.48	.87	.13	.38	.17	.67
N	**10**	**54**	**61**	**83**	**16**	**37**	**70**	**82**
Other	.40	.88	.55	.90	.12	.73	.28	.56
N	**20**	**26**	**20**	**10**	**17**	**11**	**25**	**9**

Source: GDFHS 1998 M=Male F=Female * $p<.05$ ** $p<.01$ *** $p<.001$

Interestingly, consistently larger proportions of respondents using spiritual healers, *hakims*, or other health care providers than MBBS doctors reported 'fair-to-poor' health. For example, among female respondents in urban Lahore, 67 percent of MBBS users and 88 percent of users of 'Other' health care providers reported 'fair-to-poor' health. Corresponding figures for urban Bahawalnagar were 39 percent and 73 percent. However, among females in rural Bahawalnagar and among men in urban Lahore and urban Bahawalnagar, similar proportions of respondents using MBBS doctors and 'Other' health care providers reported 'fair-to-poor' health. MBBS doctors, quacks, and dispensers and chemists generally provide modern medicines, and indigenous doctors normally use traditional medication which may have some influence on the health of respondents.

It is interesting to note that the effect on women of using MBBS doctors is more pronounced than that on men. For example, among men in urban Lahore, 37 percent of MMBS doctor users and 40 percent of the users of indigenous health care providers reported 'fair-to-poor' health. Among women in urban Lahore, however, 67 percent of users of MBBS doctors and 88 percent of users of indigenous providers of health care reported 'fair-to-poor' health ($p<.01$). Corresponding figures for men in rural Lahore were 37 percent and 55 percent and for women in rural Lahore were 66 percent and 90 percent.

While because of small numbers these differentials were not statistically significant, the analysis does suggest that modern medication is more conducive to health than is the use of indigenous medications. It is possible that education of respondents may have influenced results in Table 6.9. Hence, Table 6.10 shows proportions of respondents reporting 'fair-to-poor' health by usual health care provider, by education, region, urban-rural residence and gender. The data show that educated people were more likely to use MBBS doctors than uneducated ones. However, most numbers are small, and it is difficult to make meaningful comparisons of educated and uneducated respondents

Table 6.10 Proportions of respondents reporting 'fair-to-poor' health by usual health care provider, by education, region, urban-rural residence and gender

	Lahore				Bahawalnagar			
	Urban		Rural		Urban		Rural	
Type of heath care provider	**M**	**F**	**M**	**F***	**M**	**F**	**M**	**F**
				Uneducated				
MBBS	.56	.66	.39	.71	.20	.48	.11	.61
N	**18**	**32**	**23**	**14**	**61**	**65**	**35**	**57**
Quack	.17	a	.41	.89	.57	.25	.16	.54
N	**6**	**0**	**34**	**9**	**7**	**4**	**49**	**26**
Dispenser/Chemist	.57	.71	.57	.89	.11	.42	.21	.69
N	**7**	**21**	**37**	**74**	**9**	**31**	**57**	**80**
Other	.25	1.00	.58	.90	.14	.78	.30	.56
N	**4**	**6**	**12**	**10**	**7**	**9**	**20**	**9**
				Educated				
MBBS	.35	.68	.35	.61	.11	.32	.16	.36
N	**213**	**137**	**34**	**18**	**113**	**93**	**37**	**11**
Quack	00	1.00	.27	a	.13	a	.17	a
N	**3**	**3**	**33**	**0**	**8**	**0**	**18**	**0**
Dispenser/Chemist	.00	.64	.33	.67	.14	.17	00	00
N	**3**	**33**	**24**	**9**	**7**	**6**	**13**	**2**
Other	.44	.85	.50	a	.10	.50	.20	a
N	**16**	**20**	**8**	**0**	**10**	**2**	**5**	**0**

Source: GDFHS 1998 M=Male F=Female * p<.05 ** p<.01*** p<.001
a No cases

6.6.7 Gender Composition of Children

In the gender-sensitive patriarchal social system of Pakistan, people are concerned about the gender composition of their children. Daughters are considered a burden and are difficult to raise. The presence of more daughters than sons is expected to influence psycho-social aspects of people's health. Mothers of daughters are accorded low status, and accordingly daughters "deserve less food, health care and attention" (Winkvist and Akhtar 1997:1483). The gender composition of children is linked with subsequent

differential survival of male and female children (Muhuri and Preston 1991). "Mothers of daughters and women without children spoke of harassment in the family and society" (Winkvist and Akhtar 2000:73). Table 6.11 shows proportions of respondents reporting 'fair-to-poor' health by whether they had more or an equal number of sons, or more daughters, by region, urban-rural residence and gender.

Table 6.11 Proportions of respondents reporting 'fair-to-poor' health by gender composition of children, region, urban-rural residence and gender

	Lahore				Bahawalnagar			
	Urban		Rural		Urban		Rural	
Gender composition of children	M *	F	M	F	M	F	M	F
Equal or more sons	.32	.68	.42	.80	.13	.40	.19	.63
N	**190**	**152**	**144**	**80**	**154**	**130**	**156**	**119**
More daughters	.47	.72	.39	.85	.17	.41	.14	.59
N	**83**	**101**	**61**	**54**	**75**	**83**	**78**	**68**

Source: GDFHS 1998 M=Male F=Female * p<.05 ** p<.01*** p<.001

The data show that among men in urban Lahore, less than one-third of respondents having an equal number of or more sons reported their health as 'fair-to-poor', compared with nearly one-half of those who had more daughters (p<.01). Among other groups, except men in rural Lahore and both sexes in rural Bahawalnagar, slightly larger proportions of respondents having more daughters than sons rated their health 'fair-to-poor', but none of these other differentials was statistically significant.

6.6.8 Autonomy of Women

Women's autonomy is known to have links with health: Section 5.5.1 describes how the decision-making autonomy index was generated. It is suggested that women's empowerment is likely to improve their health, enabling them to take decisions for their own welfare (Dyson and Moore 1983, Das Gupta 1995, Sathar 1996). This may particularly be true in a highly male-dominated society like Pakistan. According to Sathar and Kazi (1997:80),

> [that] overall levels of women's autonomy are very low in rural Punjab [is] reflected in restrictions on mobility, limited participation in household decision making, and financial dependence on males. In its extreme form their powerlessness is manifested in the high incidence of self-reported domestic violence in the form of intimidation and wife beating.

And according to Stein (1997:13), "empowerment (of women) is a key strand in the web of factors that affect health."

Table 6.12 shows proportions of women reporting 'fair-to-poor' health by level of decision making autonomy, region and urban-rural residence. The data show that autonomy was a minor determinant of health. There was no significant relationship between autonomy and the self-assessed health of women at three out of four survey sites. In rural Lahore, however, 65 percent of women with low autonomy rated their health 'fair-to-poor' compared to 93 percent who had medium autonomy ($p<.05$). The percentage reporting 'fair-to-poor' health then falls to 82 for women who had high autonomy, showing an inverse U-shaped relationship. These data suggest that autonomy of women has no significant relationship with their self-assessed health.

Table 6.12 Proportions of women reporting 'fair-to-poor' health by level of decision making autonomy, region and urban-rural residence

	Lahore		Bahawalnagar	
Autonomy	**Urban**	**Rural** *	**Urban**	**Rural**
Low	.66	.65	.40	.59
N	**129**	**17**	**99**	**34**
Medium	.77	.93	.38	.61
N	**81**	**30**	**78**	**85**
High	.70	.82	.44	.64
N	**43**	**85**	**34**	**66**

Source: GDFHS 1998 * p<.05 ** p<.01*** p<.001

Another aspect of autonomy is freedom of mobility. Table 6.13 shows proportions of women reporting 'fair-to-poor' health by freedom of mobility, region, urban-rural

residence and gender. Freedom of mobility is measured using an index described earlier in Section 5.5.2 in Chapter 5.

The data show no significant relationship between freedom of mobility and self-reported health. In rural Lahore, 96 percent of women with medium freedom of mobility rated their health 'fair-to-poor' compared with 77 percent of those who had high freedom of mobility ($p<.05$). Just like autonomy, freedom of mobility has an inverse U-shaped association with self-assessed health in rural Lahore. Women having high freedom of mobility were less likely to report 'fair-to-poor' health compared with those who had a medium level of freedom of mobility. Similarly, slightly lower proportions of women with high than with medium freedom of mobility at other survey sites rated their health 'fair-to-poor'.

Table 6.13 Proportions of women reporting 'fair-to-poor' health by freedom of mobility, region and urban-rural residence

	Lahore		Bahawalnagar	
	Urban	**Rural**	**Urban**	**Rural**
Freedom of mobility				
Low	.76	.80	.42	.62
N	**67**	**46**	**31**	**58**
Medium	.73	.96	.42	.63
N	**26**	**27**	**110**	**35**
High	.67	.77	.38	.61
N	**160**	**61**	**72**	**94**

Source: GDFHS 1998 * $p<.05$ ** $p<.01$ *** $p<.001$

6.6.9 Congeniality of Inter-spousal Relationship

The nature of the relationship between husbands and wives affects the health of both men and women. In patriarchal Pakistan, women are commonly abused by men (RCIW 1997, Sathar and Kazi 1997, Fikree and Bhatti 1999). This violence against women adversely affects their psycho-physical health (Kelly 1988, Heise et al. 1994, Kitts and Roberts 1996, Jackman 1999, Shornstein 1999), so that the nature of the inter-spousal relationship can influence the health of women more adversely than that of men.

Poverty and economic pressures are major sources of domestic tension and contribute towards domestic violence. Poverty is reported to have increased by 50 percent from 1990 to 1995 (MHDC 1999).

A question was asked of respondents about the nature of their relationships with their spouses. This is a socially sensitive question and many people, especially men, did not respond to it. From among those who answered it, consistently larger proportions of women reporting tense inter-spousal relationships reported 'fair-to-poor' health. In urban Lahore, 66 percent of women who reported congenial inter-spousal relationships and 91 percent of those reporting tense relationships reported 'fair-to-poor' health ($p<.01$).

In urban Bahawalnagar, the corresponding figures were 37 percent and 56 percent ($p<.05$). Similarly, in rural Bahawalnagar a larger proportion of women reporting tense inter-spousal relations than of those reporting congenial relations rated their health 'fair-to-poor', although the difference was not statistically significant. In rural Lahore, however, there was no difference in the level of 'fair-to-poor' health reported by women claiming congenial or tense inter-spousal relationships. This may be due to the peculiar nature of this village and part coverage of the village after interviewing ceased prematurely (see Section 3.11 in Chapter 3).

Table 6.14 Proportions reporting 'fair-to-poor' health by nature of inter-spousal relationship, region, urban-rural residence and gender

	Lahore				**Bahawalnagar**			
	Urban		**Rural**		**Urban**		**Rural**	
Nature of Inter-spousal relation		**				*		
	M	F	M	F	M	F	M	F
Congenial	.38	.66	.43	.85	.22	.37	.19	.59
N	**79**	**120**	**63**	**85**	**68**	**140**	**81**	**128**
Tense	.44	.91	.63	.85	.00	.56	.50	.68
N	**16**	**35**	**19**	**20**	**1**	**34**	**2**	**28**

Source: GDFHS 1998 M=Male F=Female * p<.05 ** p<.01*** p<.001

These data suggest that the health of urban women is more adversely affected by the nature of inter-spousal relations than is that of their rural counterparts. This is not

surprising because rural women are more exposed to domestic abuse. In Lahore, 37 percent of rural and 14 percent of urban women admitted being ever abused by their husbands. Corresponding figures in Bahawalnagar were 25 percent and 21 percent. For rural women, tense relationships may be normal and probably did not affect them as much. Although the data in this survey do not show especially high proportions of women claiming tense inter-spousal relationships, data from focus group discussions with women suggest that rural women are more inclined to accept domestic violence as normal. This argument receives support from Sathar and Kazi's (1997) study showing that women in rural Punjab accept some level of domestic abuse. In rural Lahore an interviewer was busy interviewing a woman and asked a question about physical abuse by her husband. A female bystander said, "Girl, it (a husband's physical abuse) is a sort of cuddle (*laad*, an expression of love)". Therefore, it may be expected that the nature of rural inter-spousal relationships has limited influence on women's self-assessed health.

It may be noted that tense inter-spousal relationships adversely affected men's self-assessed health as well. However, the differentials were not statistically significant owing to very small numbers. This is expected in a male dominated social system. Men abuse women and feel it is their right, so it does not normally influence their health as much as that of women. Therefore it is plausible that tense inter-spousal relationships did not influence the self-assessed health of men much at all.

Another question was asked to find out how frequently husbands and wives argued. Table 6.15 shows proportions of respondents reporting 'fair-to-poor' health by whether or not inter-spousal arguing had occurred during the month before interview, by region, urban-rural residence and gender. The data show that there was no significant association between self-assessed health and inter-spousal arguing. Although this was not expected, it may not be surprising either.

Women in general, particularly those from low socio-economic strata, are socialized to accept male dominance and abuse. Inter-spousal arguing is quite a normal occurrence. Therefore, it is not surprising that inter-spousal arguing has no significant relationship with self-assessed health.

Inter-spousal arguing is expected to affect the health of men as well. The data show that slightly larger proportions of men who reported arguing rated their health 'fair-to-poor'. However, none of the differentials was statistically significant. Men dominate

women, and it is less likely that their health will be significantly affected by arguing with their spouses. It may be noted, however, that larger proportions of women than of men acknowledged inter-spousal arguing. For men, yelling at their wives is normal, and they either did not take note of it or did not report it because of shame.

Table 6.15 Proportions reporting 'fair-to-poor' health by whether inter-spousal arguing occurred in the month before interview, region, urban-rural residence and gender

	Lahore				Bahawalnagar			
	Urban		Rural		Urban		Rural	
Arguing	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**
Did not argue	.36	.70	.38	.86	.11	.41	.18	.53
N	**162**	**76**	**143**	**35**	**126**	**87**	**163**	**79**
Argued	.38	.68	.49	.82	.18	.40	.13	.66
N	**79**	**156**	**55**	**93**	**93**	**107**	**54**	**92**

Source: GDFHS 1998 M=Male F=Female * p<.05 ** p<.01*** p<.001

6.6.10 Security

Public violence against women in Pakistan, especially against minors, is significant (RCIW 1997) and is expected to have a negative effect on female health (Wilkinson et al. 1998, Fikree and Bhatti 1999, Dreze and Khera 2000). A threatening or supportive social environment may have a negative or positive effect on people's health. In the last several years, gender-based violence and insecurity have increased (RCIW 1997) and created a more threatening environment for women's mobility. To measure perceived insecurity, women were asked 'Do you feel comfortable to take the following modes of transport alone: Taxi/Rickshaw, Tonga (horse cart), and Bus/Van'. Women who responded 'No' to any of these modes were labelled 'insecure', and women who responded 'Yes' to all of them were labelled 'secure'.

Table 6.16 shows proportions of women reporting 'fair-to-poor' health by perceived security, region and urban-rural residence. The data show that, except in rural Lahore, somewhat larger proportions of insecure than secure women reported their health as 'fair-to-poor'. In rural Lahore, a larger proportion of secure than of insecure women reported 'fair-to-poor' health. This is surprising, but it may be relevant that less than 9

percent of secure compared to 29 percent of insecure women were educated. These different education levels may have contributed towards the higher reported level of 'fair-to-poor' health among secure women, since uneducated women were earlier shown to be more likely to assess their health as 'fair-to-poor'

Table 6.16 Proportions of women reporting 'fair-to-poor' health by perceived security, region and urban-rural residence

	Lahore		Bahawalnagar	
	Urban	Rural	Urban	Rural
Security				**
Insecure	.74	.78	.44	.67
N	**165**	**77**	**142**	**141**
Secure	.63	.88	.34	.43
N	**88**	**57**	**71**	**46**

Source: GDFHS 1998 * p<.05 ** p<.01*** p<.001

In rural Bahawalnagar, 67 percent of insecure women compared with 43 percent of secure ones rated their health 'fair-to-poor' (p<.01). The explanation for finding a significant relationship here but not at the other survey sites may lie in the perceived nature of security. Perceived security in taking a mode of transport was a subjective matter, and different standards of perceived security could have applied at different survey sites.

6.7 Logistic Regression Results

The tables presented in previous sections have given a limited picture of the relationship between self-assessed health and the independent variables. In contrast, regression models provide a more comprehensive treatment of complex inter-relationships among independent variables. In this section, logistic regression models are used to untangle the effect of inter-connected independent variables on self-assessed health. The explanatory variables in the models include education, age, occupation, caste, household monthly income, and gender composition of children. The variable 'usual health care provider' was also included in preliminary modelling, but as it did not turn out significant for any survey site it was dropped from the final models. Table 6.17 presents

odds ratios showing relative levels of 'fair-to-poor' health for selected variables from backward stepwise logistic regression models defined by region and urban-rural residence (the full models may be seen in Table B3 in Appendix B). Backward stepwise regression was used to identify combinations that made significant contributions to the models based on a p value for exclusion of 0.05 (SPSS 1998). If a variable was found to be significant, that variable was included in a model.

6.7.1 Models by Region and Urban-rural Residence

The data show significantly lower odds of reporting 'fair-to-poor' health by men across all four survey sites. The odds of reporting 'fair-to-poor' health by men compared to women in Lahore and rural Bahawalnagar are eight percent. Similarly, in urban Bahawalnagar, the odds of reporting 'fair-to-poor' health by men are 83 percent lower than those exhibited by women. These data show that the self-assessed health of women is a lot worse than that of men. This is not surprising, because women in Pakistan are socially disadvantaged. Fertility is high and women remain pregnant or lactating for long periods of their lives. Owing to lack of reproductive health services, their physical health is likely to suffer. Secondly, heavy domestic workloads take a heavy toll on their energy. Domestic violence is widespread, which also influences women's psycho-physical health adversely. Therefore, poorer female than male health is an expected outcome.

Age of respondents is an important predictor of self-assessed health. With increasing age, respondents rate their health more poorly. For example, in urban Lahore the odds of reporting 'fair-to-poor' health among respondents aged 35-44 years were 1.36 times those at ages <35 years, rising to three times at ages 45-54 years, and five times at ages 55+ years. The odds of reporting 'fair-to-poor' health similarly increased with age at the other three survey sites as well. The overly high odds of 29.44 for respondents aged 55+ years in urban Bahawalnagar reflects only eight cases, among which seven reported 'fair-to-poor' health.

Table 6.17 Odds ratios showing relative levels of 'fair-to-poor' health across selected variables for backward stepwise logistic regression models defined by region and urban-rural residence

	Lahore		Bahawalnagar	
	Urban	**Rural**	**Urban**	**Rural**
Predictors				
Sex of respondent				
Male	.08**	.08*	.17***	.08***
Female	ref	ref	ref	ref
Schooling				
Uneducated		ref	ref	
Educated		0.53*	0.55*	
Age				
<35	ref	ref	ref	ref
35-44	1.36	1.65	1.20	1.44
45-54	3.07***	2.65*	2.60**	3.53***
55+	5.43***	6.16***	29.44**	5.29**
Caste				
Kashmiri	0.61		a	
Arain	0.74		0.23	
Rajput/sub-castes	ref		ref	
Sheikh	2.11*		2.24	
Syed	1.81		0.48	
Occupational castes	a		0.21*	
Other castes	1.02		0.78	
Gender balance of children				
Equal or more sons	ref			
More daughters	1.56*			
Occupation				
White-collar	ref	ref		
Housewife	0.34	1.23		
Self-employed	0.44*	1.07		
Skilled workers	1.12	2.33		
Unskilled workers	0.36	3.39		
Other	0.58	5.58		
N	**517**	**334**	**431**	**417**

Source: GDFHS 1998 M=Male F=Female * p<.05 ** p<.01*** p<.001
a No cases

The negative effect of age on self-assessed health is especially understandable in a poor country like Pakistan. Poverty is widespread and nutritious foods are not available to many poor people. Hard physical labour and malnutrition take a heavy toll on health. People become weak with age and are more likely to report 'fair-to-poor' health. Therefore, it is expected that older people would report poorer health than their younger counterparts. Differentials between ages <35 and 35-44 are not statistically significant, indicating only moderate deterioration in health status. However, as people move into their late 40s and 50s, deterioration becomes more rapid.

Education has a positive effect on the self-assessed health of respondents in rural Lahore and urban Bahawalnagar. The odds of reporting 'fair-to-poor' health declined by nearly one-half if respondents were educated. Educated people are expected to be more aware of health dynamics and can act to take care of themselves. They, more than their uneducated counterparts, can maintain better sanitary conditions to keep diseases at bay. Also, they are expected to note ailment symptoms and take corrective action more readily. Education was not an important contributor to self-assessed health in urban Lahore and rural Bahawalnagar. Notably, these were survey sites at which respondents were, respectively, overwhelmingly educated and overwhelmingly uneducated. Education was significant at the two sites where respondents were more evenly split between educated and uneducated (see Table 6.4).

Caste of respondent is a predictor of health in urban, but not in rural areas of the two districts. In urban Lahore, members of the Sheikh caste exhibited twice the odds of reporting 'fair-to-poor' health as those of the Rajput and allied castes. A similar, though not statistically significant, situation pertained in urban Bahawalnagar, where Arain and occupational caste respondents also had much lower chances of reporting 'fair-to-poor' health than Rajput and allied caste respondents. Syeds in urban Bahawalnagar had only half the odds of reporting 'fair-to-poor' health of the reference caste group, whereas those in urban Lahore had almost double the reference group odds of doing so. Caste being a less important determinant of self-assessed health in rural areas is surprising, because caste stratification is expected to be more intense in rural than in urban areas. Caste is expected to influence the occupations and incomes of people, especially in rural areas, but the situation may be changing through extensive rural-urban and overseas work migration.

Presence of daughters is an important source of psycho-social pressure and is expected to influence psycho-physical health. In urban Lahore, the odds of reporting 'fair-to-poor' health increased by 56 percent if respondents had more daughters than sons. However, at the other three survey sites the association between gender composition of children and self-assessed health was not significant, and the variable was dropped from models by the stepwise regression process. In the mega-city of Lahore, the raising of daughters is hard because of the increasing costs of marriage and security issues. In a focus group discussion with men in urban Lahore, one participant said: "A daughter is a

debt account." He continued: "A daughter is a source of tension right from birth". This participant having broken the ice, other participants started agreeing with him. Another said: "Teasing and kidnapping of girls is a source of tension", and still another observed: "When a girl is away from home in public, she is a cause of stress and strain". As the discussion continued, a less vocal participant said: "Tension starts right from the time when the *dai* (birth attendant) asks you to bring clothing to cover her". In such a tense gender environment, larger numbers of daughters than sons are expected to influence the psycho-physical health of people from urban Lahore.

Occupation is generally associated with education and income, and consequently influences people's health in different ways. The data show that in rural Lahore, after controlling for education, respondents of all other occupations besides white-collar workers and the self-employed exhibited higher odds of reporting 'fair-to-poor' health. Compared to the rural poor, the two groups are well paid and socially respected. Their high social respect is likely to have contributed towards their better self-assessed health. In urban Lahore, most non-white-collar occupations exhibited lower odds of reporting 'fair-to-poor' health. In metropolitan Lahore, the incomes of white-collar workers are in general not commensurate with the requirements of living in a mega-city. White-collar workers tend to be under financial pressure compared with people in other occupations, which may have contributed to their higher odds of reporting 'fair-to-poor' health.

In summary, the self-assessed health of women is lot worse than that of men across all four survey sites. This is expected because of their low social status, high fertility, and pervasive domestic violence. Age is the most significant other predictor of self-assessed health. Poverty is widespread, and aging is expected to influence the physical health of people because of hard labour and malnutrition. In metropolitan Lahore, self-assessed health was linked with an excess of daughters over sons in families. If respondents had more daughters than sons, they reported 'fair-to-poor' health more frequently. White-collar occupations in rural Lahore were health producing, while in urban Lahore they were health-damaging.

6.7.2 Models by Region, Urban-rural Residence and Gender

This section examines logistic regression models refined by gender of respondent. Table 6.18 presents odds ratios showing relative levels of 'fair-to-poor' health across

selected variables for backward stepwise logistic regression models (full models can be seen at Table B4 in Appendix B) defined by region, urban-rural residence and gender. For male respondents the same set of variables (except sex of respondent) was entered as in the models just discussed. For female respondents three additional variables, decision making autonomy, freedom of mobility and security, were included, and occupation was excluded because 84 percent of them were housewives.

Among men in urban Lahore, age, gender composition of children and caste are significant predictors of self-assessed health. The explanations for these three variables given in the comments on Table 6.17 are applicable again. However, among women in urban Lahore only security turned out to be a significant predictor of health. Given the insecure environment of metropolitan Lahore, this is not surprising. Insecurity in urban Lahore was so pervasive that women were reluctant to open doors when interviewers called (see Section 3.11 in Chapter 3). High felt insecurity is likely to have restricted women's physical mobility, causing anxieties and adversely influencing their psycho-physical health.

In a women's focus group discussion in urban Lahore, a woman said: "My son and a daughter go to nearby schools that are similar distances away, but I have to pay 500 rupees (approximately US$10.00) per month to arrange transport for her, but not for him". Another woman said: "I am worried due to the insecure social environment", and yet another participant said: "Boys from schools and colleges do not spare anyone (female), whether she is a minor or an adult." The woman continued: "I become tense when she (her daughter) does not return home on time". In both urban and rural Lahore, age was not a significant variable for female respondents. This is an interesting finding and may be viewed in the light of discussion in the previous paragraph. Women feel insecure in the metropolitan environment of Lahore.

Among men in rural Lahore, age, caste, and occupation are significant predictors of self-assessed health. Aging is expected to influence the health of both men and women adversely in poor communities. However, the poor health of women is an exception. Compared with Rajput and allied castes, most other caste groups exhibited lower odds of reporting 'fair-to-poor' health. Rajput and allied castes formed a substantial proportion in this village, 42 percent of male respondents. They are not the poorest of the poor either. Their reported income is close to that of the other large caste group, Arain, and higher

than those of other caste groups. However, this village has destabilized gender structures and the Rajput caste appears to be sensitive to undermining of patriarchal structures, which may have influenced members' self-assessed health negatively.

Table 6.18 Odds ratios showing relative levels of 'fair-to-poor' health across selected variables for backward stepwise logistic regression models defined by region, urban-rural residence and gender

	Lahore				Bahawalnagar			
Predictors	**Urban**		**Rural**		**Urban**		**Rural**	
	M	**F**	**M**	**F**	**M**	**F**	**M**	**F**
Schooling								
Uneducated				ref	ref	ref		
Educated				0.24**	0.45*	0.53		
Age								
<35	ref		ref		ref	ref	ref	ref
35-44	9.39*		1.91		0.78	1.46	4.00*	2.09*
45+54	25.41*		3.82*		1.56	3.02**	11.61*	4.10**
55+	44.88**		16.34***		a	23.92**	16.48*	a
Caste								
Kashmiri	0.82		0.71			0.01		
Arain	0.60		0.52			0.30		
Rajput/Sub-castes	ref		ref			ref		
Sheikh	2.68*		0.00			2.09		
Syed	2.02		0.95			0.53		
Occupational castes	0.00		0.28			0.13*		
Other castes	0.74		1.55			1.09		
Gender composition of family								
Equal or more sons	ref							
More daughters	2.27*							
Occupation								
White-collar		NA	ref	NA		NA		NA
Self-employed		NA	0.80	NA		NA		NA
Skilled workers		NA	2.40	NA		NA		NA
Unskilled workers		NA	3.90***	NA		NA		NA
Other		NA	9.04*	NA		NA		NA
Freedom of mobility								
Low	NA		NA	1.12	NA		NA	
Medium	NA		NA	6.91	NA		NA	
High	NA		NA	ref	NA		NA	
Income (Rs/Month)								
<5000								ref
5000+								0.37*
Security								
Insecure	NA	ref	NA		NA		NA	ref
Secure	NA	0.58*	NA		NA		NA	0.32**
N	**272**	**253**	**205**	**132**	**226**	**209**	**234**	**185**

Source: GDFHS 1998 M=Male F=Female * p<.05 ** p<.01 *** p<.001

a >100 because a very high proportion of a small number of cases reported 'fair-to-poor' health

In rural Lahore, compared with white-collar workers, all occupations (with the exception of self-employed) exhibited higher odds of reporting 'fair-to-poor' health. White-collar jobs are scarce among villagers characterized by high illiteracy, and white-collar employees in rural areas are well respected and relatively well paid. Also, white-collar jobs are available only to educated people, which may have influenced their health positively. Similar odds ratios indicate that the self-assessed health of the self-employed was equivalent to that of white-collar workers. The self-employed, too, are well respected and expected to be financially well off.

Among women in rural Lahore, education and freedom of mobility were significant predictors of self-assessed health. The odds of reporting 'fair-to-poor' health declined by 76 percent if a woman was educated. Literacy among females, particularly among rural women, is low. Education helps them manage their affairs better than their uneducated counterparts. They can understand hygiene issues better than uneducated women do. There are other benefits of education like autonomy, initiative, and action, which may have contributed towards better self-assessed health. The odds ratio of 6.91 for the medium level of freedom of mobility suggests that women who have high freedom of mobility are less likely to report their health as 'fair-to-poor'. This is understandable, for if women can move around they can act for their welfare and health, for example by obtaining health care. Notably, however, the odds of reporting 'fair-to-poor' health of women with low freedom of mobility were also low. Quite why is unclear.

Among men in urban Bahawalnagar, education and age were significant predictors of self-assessed health. The odds of reporting 'fair-to-poor' health declined by more than one-half if a man was educated. Education, as noted earlier, plays an important role in relatively disadvantaged communities, and low odds of reporting 'fair-to-poor' health by educated men are expected. Age was not as significant a predictor among men in urban Bahawalnagar as at the other three survey sites. A plausible explanation is that the entry of education into this model usurps some of the age effect, because the uneducated tend to be older.

Among female respondents in urban Bahawalnagar, just as among those in rural Lahore, education influenced self-assessed health positively. The odds of reporting 'fair-to-poor' health declined by nearly one-half if women were educated. Age of woman was also a significant predictor of self-assessed health. In rural Bahawalnagar, the odds of

reporting 'fair-to-poor' health increased fourfold if a woman was 45-54 years old compared to <35 years old. The odds for the 55+ age category were much higher because, of only seven women in the category, six reported 'fair-to-poor' health. Caste was another predictor of self-assessed health among women in urban Bahawalnagar. Sheikh women exhibited higher odds of reporting 'fair-to-poor' health than Rajput and allied caste women. Arain, Syed, and occupational caste women exhibited lower odds. The lower odds of reporting 'fair-to-poor' health by women in occupational castes are surprising, but they may have large social networks due to the artisan nature of their work, which may have contributed towards better self-assessed health.

Among men in rural Bahawalnagar, age was the only significant predictor of self-assessed health. Widespread poverty and hard agricultural labour in rural Bahawalnagar may have contributed towards poorer self-assessed health among older respondents.

Among women in rural Bahawalnagar, age, household income, and security were the significant predictors of self-assessed health. The odds of reporting 'fair-to-poor' health doubled among women aged 35-44 years and quadrupled for those aged 45-54 years as compared to women aged <35 years. It may be noted that an odds ratio above 100 for women aged 55+ years is due to the fact that all seven women aged 55+ years in the rural Bahawalnagar sample reported 'fair-to-poor' health.

Household income turned out to be a significant determinant of self-assessed health only among women in rural Bahawalnagar. The odds of reporting 'fair-to-poor' health declined by nearly two-thirds if a woman belonged to a higher income household. As noted earlier, poverty is widespread in rural Bahawalnagar and transport facilities from rural Bahawalnagar to the city are inadequate. Women from higher income households could probably better access city-based health care facilities, which may have contributed towards their better reported health. According to a study done in Baluchistan and NWFP, distance to hospital was found to be an important determinant of women's health (Midhet et al. 1998). Life in rural areas is hard and higher-income women are likely to obtain help for their household chores and other farming-related jobs. Therefore, it is not surprising that income is a significant determinant of female health in poor rural Bahawalnagar.

The odds of reporting 'fair-to-poor' health declined by two-thirds if women in rural Bahawalnagar were secure rather than insecure. Security was measured by asking

questions about the capacity of women to take various types of public transport vehicles. The ability to take such a vehicle is a security issue in large cities, but may not be so in rural Bahawalnagar, where these facilities are not widely available. If a transport mode was not available, respondents are likely to have indicated they had no capacity to use it. Therefore, it may not so much be insecurity as unavailability of transport facilities which adversely influenced the health status of females in rural Bahawalnagar.

To sum up, age was the most important predictor of self-assessed health among most groups of respondents across all survey sites. This is expected, especially in poor communities such as those where fieldwork was conducted. Poverty coupled with malnutrition is expected to influence the health of people as they grow old. Education had a positive influence on the health of female respondents in rural Lahore and urban Bahawalnagar, and also among men in urban Bahawalnagar. Education is an important predictor of health because it helps people to make the best use of available resources. Educated people are likely to be more aware of sanitation issues. Education, by increasing awareness, autonomy, initiative, and action helps to improve or maintain health in poor communities.

Caste was a significant predictor of self-assessed health among men in Lahore and women in urban Bahawalnagar. Having more daughters than sons was a significant predictor among men in urban Lahore only. This is interesting and deserves some comment. Daughters are widely acknowledged by respondents to be an economic burden, and this view is not confined to urban Lahore. Every family in both urban and rural areas faces the dowry and wedding costs of daughters, but in urban Lahore the security of daughters is an additional and serious issue. It was noted earlier in this section that daughters are a source of tension because of this security problem. In such circumstances, having more daughters than sons influences the self-assessed health of men in Lahore City. This finding is buttressed by the fact that security is an important predictor of the self-assessed health of women in urban Lahore.

6.8 Effect of Gender-based Concerns on Self-assessed Health

Gender-based concerns about sons and daughters are an important source of tension and pressure for parents in Pakistan. Differential concerns about the lives of male

and female children were examined in Section 5.7 in Chapter 5. The data showed different levels of parental concern for sons and daughters about different aspects of children's lives. For example, parents were generally more concerned about the marriages of their daughters and employment of their sons, and while they were concerned about the education of both sons and daughters, they were more concerned about that of sons. Such gender-based concerns are expected to produce stressful conditions and to influence the psycho-physical health of men and women.

According to Argyle (1997:769) "distress is related to poor health". Anxiety, depression and other psychosomatic ailments are caused by stress and "the correlation is stronger for women, and when subjective measures of health are used" (Argyle 1997:769). It was hypothesized that gender-based concerns would affect the health of parents adversely, especially that of women. According to Winkvist and Akhtar (2000), the health of the mothers of daughters is poorer than that of the mothers of sons.

The gender-based concerns discussed in Chapter 5 were examined in logistic regression models, but did not turn out to be statistically significant and were dropped from the final models presented and discussed above. However, there were suggestions in qualitative data collected of a link between health and gender-based concerns. In a focus group discussion with women in urban Lahore, when asked about the effect of psycho-social pressures on their health, a participant said: "It depends upon individuals, some people will be affected, others not". In a focus group discussion with men in urban Lahore, when asked about the effect of having more daughters than sons on the amount of tension on parents, several people spontaneously said: "One hundred percent (i.e. they were definitely affirmative)". Another participant said: "The presence of a daughter (a female of any age) is a source of tension. Any thought of possible stigmatic behaviour by a daughter is scary, but a son's untoward behaviours are, sometimes knowingly, tolerated". Yet another participant said: "When a daughter is 8-10 years old, the tension starts. It is an Islamic teaching that at the age of eight years, a sister should no longer sleep with her brother". When asked how daughter-related tension affected health, one participant recounted a story about his friend:

> A neighbourly friend of mine asked me to take him to a renowned cardiologist, another friend of mine. During the course of diagnostic communication between the doctor and the patient, he said to the doctor

that he had a daughter (more than 30 years old), for whom no (acceptable) marriage proposal had come. He (the patient) said: 'that stress of (my) daughter (not being married) has eaten me (destroyed my health)'.

Then the participant, seeking an affirmative response, asked the author: "Now you tell me whether such tensions affect people's health or not".

In a focus group discussion with doctors at the Department of Community Medicine in a Medical College in Lahore, while discussing the effect of daughter-induced stress on health, a doctor said: "Stress brings physio-chemical changes. These changes have psychological and psychosomatic effects". In another focus group discussion at DHQ Hospital Bahawalnagar, doctors were of the view that stress and pressures cause high blood pressure and diabetes. A doctor said: "Sugar (diabetes) and (high) blood pressure are caused by tension". The doctor was asked to put a percentage on the number of patients with diabetes and high blood pressure whose conditions were caused by tension. He said: "The definite cause lies in something else, but tension aggravates the ailments".

An interview with a local doctor in urban Lahore revealed an interesting piece of evidence to link health and gender-based tensions. The private general practitioner used to treat 20-30 patients a day. He said: "Nearly 50 percent of my patients are adults, and to fifty percent of these adult patients I normally give tranquillizers". This doctor used to keep a record of all his patients in his computer, and used those data for diagnosing ailments and prescribing medicines. The data included patients' socio-economic and household circumstances. He said: "Most of these patients who were given tranquillizers seemed to have daughter- or sister-related problems". This argument receives support from the logistic regression model for urban Lahore which showed a significant impact of having more daughters than sons on men's self-assessed health (Table 6.18).

These qualitative data show that people are especially concerned about their daughters because they are likely to create continuing problems for their parents, even after marriage. These gender-based concerns affect parents' health negatively. Diabetes and high blood pressure were the diseases named in focus group discussions with members of the public and with doctors as being linked with gender-based concerns. Although the linkage is not really direct, people perceive these concerns to have a substantial impact on their psycho-physical health.

6.9 Conclusions

Self-assessed health is a useful measure of personal health status. This is evident from the fact that significant proportions of both male and female respondents reporting 'fair-to-poor' health also reported some sort of long-standing illness. Self-assessed health is a subjective measure, and levels of such a measure are likely to vary across different socio-cultural contexts. Bahawalnagar is an under-developed and largely rural district. Illiteracy is high, and life is relatively simple. Lahore, on the other hand, is largely urban, and life is more complex. In Lahore, a higher demand is placed by the complexities of metropolitan life on the time of individuals. Because of this, the people of Lahore are likely to be more tense and under more psycho-social pressure. Consequently, higher proportions of respondents from Lahore than from Bahawalnagar were expected to, and did, rate their health 'fair-to-poor'.

Gender differences in subjective health existed in both urban and rural areas of Lahore and Bahawalnagar. Around double the proportion of Lahore women compared to men rated their health 'fair-to-poor'. In Bahawalnagar, three times more women than men rated their health 'fair-to-poor', but the proportions of women so rating their health were lower than in Lahore because the proportions of men with 'fair-to-poor' health were the lowest of all. These gender differentials may partly reflect the extended periods of their lives over which women typically bear children. However, although women's childbearing role is an important determinant of their health, the socio-cultural conditions in which they live also contribute significantly towards their much more frequently rating their health 'fair-to-poor'.

The exceedingly low proportions of males in both urban and rural Bahawalnagar rating their health 'fair-to-poor' may be due to different psycho-social milieus in the two districts. The social, economic, and political structures in metropolitan Lahore are complex, while those in Bahawalnagar are simple. Overall, living in Bahawalnagar is easy, while living in Lahore is much more difficult. For example, opportunities for upward social mobility in Bahawalnagar are limited, while in Lahore they are plentiful. This relative lack of opportunity produces minimal pressures to pursue social advancement in Bahawalnagar. Due to the low levels of psycho-social pressure that flow

from this situation, men in Bahawalnagar tend to rate their self-assessed health better than do those living in Lahore.

Another cultural factor causing Bahawalnagar men to rate their health 'fair-to-poor' less frequently than their Lahore counterparts lies in the sub-cultures of the two districts. Women in Lahore are more aware of their rights than those in Bahawalnagar, and men feel the brunt of women's distaste for prevailing gender relations. In Bahawalnagar, however, women probably are more accepting of male domination, and this relative meekness may be a factor in relatively few men having rated their health 'fair-to-poor'. This argument receives support from the fact that 69 percent of Lahore women and only 55 percent of Bahawalnagar women acknowledged arguing with their husbands during the month prior to interview.

In general, living in Bahawalnagar is easy while living in Lahore is troublesome and complex. The environment is more polluted in Lahore than in Bahawalnagar. The higher levels of noise and air pollution in Lahore are likely to harm people's physical and psycho-social health. Such differential life conditions in the two districts produce stresses and strains that have a comparatively negative effect on people's self-assessed health in Lahore.

Occupation, income, caste, the type of usual health-care-provider, family size, gender composition of children, women's degree of autonomy, nature of inter-spousal relationship and women's perceived degree of physical security all were found to bear some relationship to self-assessed health. However, the contributions of these variables were mostly minor, in that they emerged as significant in relatively few of the eight gender/survey site combinations. After controlling for other variables, gender and age were the most consistently significant predictors of self-assessed health. Education had a variable impact in different contexts.

Education turned out to be a significant determinant of self-assessed health in rural Lahore and urban Bahawalnagar, but not in urban Lahore or rural Bahawalnagar. The latter two survey sites were respectively the most uniformly literate and the most uniformly illiterate of the four, while the former two were educationally more heterogeneous. This very heterogeneity may well underpin the statistical significance of the education variable for those sites, and it should not be assumed that its non-emergence

in modelling for rural Bahawalnagar necessarily signifies that no health advantage is likely to flow from improving literacy in that setting.

At all survey sites significantly larger proportions of respondents rated their health 'fair-to-poor' with increasing age. This was to be expected. However, when regression models were refined by gender (Table 6.18), age was not significant for females in urban and rural Lahore. This departure from the norm is important, clearly highlighting relatively poor self-assessed health at younger ages (rather than relatively good health at older ages). The qualitative data suggest that women in Lahore felt quite insecure, and this feeling of insecurity is likely to have produced stress at relatively young ages. It is also possible that younger women were concerned about the welfare of their families to a degree that similarly caused stress and tension that rendered their self-assessed health poorer.

The self-assessed health of women was substantially poorer than that of men. Self-assessed health has psycho-physical dimensions. Amidst poverty, a high frequency of childbearing, heavy workloads at home and on farms (in the case of rural areas), and frequent domestic violence take a heavy toll on women's limited stock of physical energy. This physical drain should be partly addressed by providing appropriate contraceptive services. Only a minority of Pakistani women has access to contraception, and this situation needs to improve. The domestic workloads of women cannot be addressed easily, but effective strategies to combat domestic violence should be able to be developed.

Awareness campaigns and the administration of true justice under laws which, if followed, already provide for it, should help to reduce abuse of females. Among other things, exemplary punishment of abusers needs to replace the leniency they currently are all too often shown. Awareness programs do, however, need to be carefully planned so as not to *encourage* violence against women. Some perpetrators of domestic violence attach machismo to their behaviour, and an ill-planned campaign could be counter-productive. Violence against women must be presented as having serious, negative, social and legal consequences for its perpetrators.

New legislative measures, such as the provision of job quotas for women in areas like administration and the judiciary, and quotas in political forums like parliaments and assemblies, should also be taken to dissuade crime against women. Such measures would

raise women's social status and help to create a social milieu conducive to female emancipation.

The employment of women is an intricate social issue. Besides being culturally sensitive, while it potentially can provide them with economic autonomy, it also usually imposes an additional physical burden. Employed women generally are expected to continue doing their home chores, so that employment merely further burdens their already burdened lives.

Social structures normally are rigid, and people do not readily accept change. Any change in social structures must be carefully planned. Excessive dependence of women on men is an important contributor towards their low status, social disadvantage, and hence poor self-assessed health. The economic dependence of women may be addressed partly by attributing appropriate economic worth to their domestic work. Childcare centres operate in most large cities these days, for which suitably well-to-do parents pay handsomely. The revenue these services attract could be publicized in media campaigns to apprise people of the value of this work. Similarly, the economics of commercial household kitchen operations could be used to create mass awareness of the importance of women's household work.

Provision of physical security to girls and women, both in public and at home, is vital to improving their psycho-social health. It can help raise their self-confidence and self-esteem. Infra-structural improvements, such as the provision of better street lighting and a noticeable presence of female police, could improve perceived security among women. However, rapid, non-discriminatory administration of justice for crimes committed against women is critical. Procedural shortcomings in the Departments of Police and Justice must be addressed to minimise injustice against women. The appointment of women to the officer ranks of the police and as judges and lawyers must also be given high priority in planning administrative change.

Child socialization issues emerged as a source of tension between spouses that might lead to domestic violence against women, and is another area worth exploring for policy intervention. For example, provision of more opportunities for free education of young children could lessen the scope for development of such tension by keeping children away from home for longer periods of time.

The financial needs of children are another source of inter-spousal conflict and potential violence against women. The Government of Pakistan has recently launched poverty alleviation programs. These programs need to be extended to all areas of the country, especially to small villages in rural Pakistan. Including such initiatives as the cooperative development of crafts and small-scale food packaging, they have the potential to lessen the economic pressure that sometimes generates domestic violence.

Chapter 7

Differentials in Morbidity, Health Services Use and Mortality

7.1 Introduction

Measures of morbidity and mortality are important indicators of population-based health inequalities (Caldwell and Caldwell 1993, Wagstaff and Doorslaer 1994, Suleman 1996). Morbidity information for a population can show the prevalence of certain health conditions among its constituent groups. Such information can identify groups of people who are at high risk, and hence may require urgent help from professionals and policy makers. Different patterns of health and disease are reported across geographic regions, between urban and rural areas, among people from different socio-economic backgrounds, and between males and females (Mahmood and Mahmood 1995, Arber 1997, Mahmood and Nayab 1998).

Morbidity statistics are collected through either health care facilities or household surveys. Hospital-based data have their limitations, because a substantial proportion of people do not use hospitals for routine health care. Data gathered through health care providers have limited scope because a substantial proportion of illness remains untreated or self-treated, especially in poor countries. Similarly, symptoms and etiology may not be established accurately, and hence may be recorded incorrectly. On the other hand, in household surveys people may conceal morbidity information owing to social stigma or perceived embarrassment. In some cases, people may not recall an illness episode, may have forgotten the occurrence of a disease for which information is sought, or may not be aware of it. Even with these difficulties, morbidity information is collected and used extensively in research and policy.

7.2 Morbidity

Malnutrition is not a focus of this chapter, but morbidity has a strong link with malnutrition, for which a gender bias is sometimes reported (Chen et al. 1981, Sen and Sengupta 1983, Chatterjee and Lambert 1989, Miller 1997). According to Pelletier (1996:150), "malnutrition is common in developing countries and makes an important contribution to the burden of morbidity and mortality of infants and children". There is a

synergic link between malnutrition and disease, but classifying the cause of death in proximate terms (infectious diseases) conceals the association between malnutrition and mortality (World Bank 1993). Secondly, mild malnutrition is perceived not to increase the risk of mortality (Bairagi 1981 cited in United Nations 1996:150). This perception mitigates the effect of malnutrition on morbidity and mortality. Although studies done in Bangladesh and India suggest that gender differentials in child mortality are due to differential treatment of illnesses and not to differential food allocation (Basu 1989), malnutrition does have an indirect link with morbidity and mortality. According to the 1990-94 NHSP (PMRC 1995:20), "malnutrition continues to be a major problem in Pakistan. Inadequate nutrition contributes substantially to childhood death and disease but often goes unrecognized as such".

The NHSP found that one in three children in Pakistan was malnourished, and larger proportions of girls than boys suffered from malnutrition. Among children aged under 5 years, nearly 18 percent of females and 16 percent of males in rural Pakistan, and 14 percent of females and ten percent of males in urban Pakistan, were underweight (PMRC 1995). These male-female malnutrition statistics show that female children are at a disadvantage in terms of food and care.

According to the International Centre for Research on Women (ICRW 1989:3), "The high prevalence of protein-energy malnutrition, iron deficiency anemia, and iodine deficiency disorders among women in developing countries make a strong case for giving priority to efforts to reduce malnutrition among women". In Pakistan, larger proportions of women than of men are reported to be anaemic (PMRC 1995), and action to redress their greater illness vulnerability due to malnutrition has been called for (Winkvist et al. 1994, Winkvist 1995).

In the present survey, respondents were asked about illness in the household during the month before interview. In total one-third of respondents reported illness in their households. Among morbidity-reporting households, about ten percent reported two or more persons being ill. Table 7.1 shows the prevalence of illness among household members during the month before interview by region, urban-rural residence and gender of ill person.

Table 7.1 Prevalence of illness per thousand members of households during the month before interview by region, urban-rural residence and gender of household member

	Lahore				Bahawalnagar			
	Urban		Rural		Urban		Rural	
	*		*		*		*	
	M	F	M	F	M	F	M	F
Proportion	.072	.085	.074	.082	.026	.037	.022	.045
N	1645	1559	1249	1121	1556	1461	1563	1421

Source: GDFHS 1998 M=Male F=Female * p<.05 ** p<.01*** p<.001

The data show variations between regions and between urban and rural areas. Gender differentials in reported illness were significant at all survey sites. In urban and rural Lahore, seven percent of males and eight percent of females were reported to have been ill ($p<.05$). In urban Bahawalnagar, the corresponding figures were three and four percent ($p<.05$). Reported illness among men in rural Bahawalnagar was lower than at other survey sites, only two percent compared to a figure twice as high for females ($p<.05$). Health services are scarce there, and the lower reported rate of male illness may be due to reporting of only those ailments for which medical treatment was sought. Among women, the lowest reported illness rate was in urban Bahawalnagar, at under four percent.

Morbidity data are scarce in Pakistan. A recent Department of Health, Government of Punjab health report based on 1997 data from public-sector health services suggests a higher prevalence of illness in Bahawalnagar District (72.3 cases per 1000 population) than in Lahore District (43.0 cases per 1000 population) (Government of Punjab 1997:27-28). These data, however, pertain to new curative cases taken to government health facilities. Cases attended by private sector health workers or for which medical assistance was not sought are not included. Lahore District has a greater proportion of private health services than does Bahawalnagar. According to the 1990-94 NHSP, only one-fifth of Pakistanis used government health services, so it is logical to presume that Lahore residents used private health services more frequently than Bahawalnagar residents. Hence the prevalence differential cited above cannot be relied upon.

These regional and urban-rural comparisons are interesting. Lahore is much more developed than Bahawalnagar, but densely populated and polluted. Environmental contamination may have contributed to the higher prevalence of reported ailments in Lahore. Bahawalnagar District is vast, and its population density was only 6.5 percent of that of Lahore in 1998 (Government of Pakistan 1998b). Although health care services are poorer in Bahawalnagar than in Lahore, the high level of crowding in Lahore probably has contributed to the higher prevalence of reported illness there (Agha 2000). According to a report on the environment in Pakistan, dense population and high population growth are linked with "both economic decline per capita and increased environmental degradation", having a negative effect on public health (Amalric and Banuri 1995:9). It is claimed that "high fertility and population growth is contributing to the damaging of the natural resource base" (Nafis Sadik cited in Ghimire 1993:3), posing a threat to human populations in rapidly growing cities like Lahore. Secondly, people in Lahore are more educated than those in Bahawalnagar (see Section 4.9 in Chapter 4). This may have increased awareness and reporting of morbidity in Lahore.

Table 7.2 shows the prevalence of illness in households during the month before interview by age, region, urban-rural residence and gender of household member. The data show that among persons aged 15-49, consistently larger proportions of women were reported to have been ill during the month before interview. The differentials were statistically significant for three out of four survey sites. Among children, there was no consistent gender differential in the reporting of ailments, and gender differentials were generally not statistically significant.

These data suggest that the prevalence of reported morbidity was higher among women than among men. However, although there is a suggestion that slightly larger proportions of female than male children aged 1-4 were reported sick, these gender differentials were not statistically significant. Mothers reported higher morbidity among female members of their households than fathers did. In Lahore, among children aged 0-4 years, mothers reported more illness among girls and fathers more among boys. In Bahawalnagar, mothers reported more illness among both sexes than fathers. For example, in urban Bahawalnagar, mothers reported 11 percent, and fathers only one percent, of sons aged 0-4 years as having been ill ($p<.05$). It is possible that fathers in urban Lahore may be more conscious of ailments among sons than daughters.

Table 7.2 Prevalence of illness in households during the month before interview by age, region, urban-rural residence and gender of household member, by gender of respondent

	Lahore				Bahawalnagar			
	Urban		Rural		Urban		Rural	
	M	F	M	F	M	F	M	F
Age				**Fathers**				
0-4	.21	.09	.15	.11	.01	.03	.01	.04
N	**42**	**46**	**71**	**57**	**102**	**97**	**95**	**80**
5-14	.08	.08	.07	.08	.01	.00	.00	.01
N	**235**	**203**	**235**	**176**	**280**	**258**	**303**	**263**
15-49	.05	.07	.05	.06	.02	.04	.01*	.05
N	**456**	**439**	**343**	**340**	**422**	**380**	**434**	**399**
50+	.16	.09	.09	.05	.02	.20	.20	.08
N	**76**	**32**	**54**	**20**	**42**	**5**	**5**	**13**
Age				**Mothers**				
0-4	.09	.21	.13	.19	.11	.12	.12	.12
N	**44**	**56**	**60**	**47**	**63**	**58**	**49**	**73**
5-14	.10	.12	.09	.06	.04	.03	.03	.04
N	242	**209**	**166**	**173**	**229**	**234**	**212**	**209**
15-49	.07	.07	.06*	.13	.02	.04	.03	.05
N	407	**502**	**239**	**240**	**330**	**368**	**302**	316
50+	.02*	.13	.14*	.00	.04	.14	.03	.10
N	**112**	**48**	**43**	**33**	**55**	**22**	**64**	**29**
Age				**Total**				
0-4	.15	.16	.15	.14	.05	.06	.05	.08
N	**86**	**102**	**131**	**104**	**165**	**155**	**144**	**153**
5-14	.09	.10	.08	.07	.03	.02	.02	.02
N	**477**	**412**	**401**	**349**	**509**	**492**	**515**	**472**
15-49	.06	.07	.05*	.09	.02*	.04	.02*	.05
N	**863**	**941**	**582**	**580**	**752**	**748**	**736**	**715**
50+	.07	.11	.11*	.02	.03*	.15	.05*	.17
N	**188**	**80**	**97**	**53**	**97**	**27**	**131**	**42**

Source: GDFHS 1998 M=Male F=Female * p<.05 ** p<.01*** p<.001

Table 7.3 shows proportions of females among new patients taken to government health care facilities in 1997 by region and age. The data show that more females than males of all ages were taken to government-operated health care facilities in both districts. However, among children aged under five years, larger proportions of boys than girls received treatment at government health care facilities. This differential in health care use is somewhat mitigated by the male-dominated sex ratio at birth. Nevertheless, this finding is in line with data collected for this study, which show appreciably larger

numbers of male than female children receiving treatment in government hospitals in Lahore and Bahawalnagar (to be discussed in Section 7.4).

According to the 1990-94 NHSP (PMRC 1995:105), in urban Pakistan, as reported by mothers of children, 25 percent of female and 23 percent of male children under five years of age were in fair or poor health. In rural Pakistan, however, nearly 36 percent of girls and 38 percent of boys were reported to have fair or poor health. These data suggest that the health statuses of children vary between urban and rural populations. Gender differences are small, and run in opposite directions.

Table 7.3 Proportions of females among new patients taken to government health facilities by region and age, 1997

	All ages		<5 years	
	Lahore	**Bahawalnagar**	**Lahore**	**Bahawalnagar**
	.59	.52	.49	.46
N	**286787**	**192835**	**51799**	**35551**

Source: Annual Report, Department of Health, Government of Punjab, Lahore, 1997:29-30

7.3 Determinants of Morbidity

Table 7.4 shows odds of reporting a child aged 0-9 years ill from logistic regression models by region and urban-rural residence. Variables entered in the model included 'age of child', 'sex of child', 'number of children in family', 'sex of respondent', 'mother's education' and 'monthly income of household'. The analysis shows that one-year-old children were significantly more vulnerable than nine-year-olds to ailments at all survey sites. Their risk of being reported ill was from five to almost eight times greater. This might be due to weaning and the introduction of solid foods. One-year-old children also start crawling and interacting with the environment in ways which may cause ailments. Generally, younger children were more vulnerable to ailments than older ones. This is in line with Bennett's finding in a study conducted in Rawalpindi City, where risk of illness decreased with increase in age (Bennett 1995). For example, in urban Lahore and rural Bahawalnagar, children aged four were nearly four times more likely to be reported ill as nine-year-olds.

Table 7.4 Odds of reporting a child aged 0-9 years sick: logistic regression models by region and urban-rural residence

	Lahore		Bahawalnagar	
	Urban	**Rural**	**Urban**	**Rural**
Age of child				
0	3.04	1.23	0.00	3.37
1	7.17*	4.73*	5.12*	7.65*
2	4.96*	0.89	3.29	1.28
3	1.99	3.02	2.24	1.73
4	3.83*	1.32	1.17	3.74*
5	3.04	1.25	1.06	1.32
6	2.82	1.32	1.18	0.80
7	1.58	0.77	0.57	0.00
8	2.43	1.62	0.00	0.45
9	ref	ref	ref	ref
Sex of child				
Male	ref	ref	ref	ref
Female	1.11	0.64	0.64	0.54
No. of children in household				
1-2	ref	ref	ref	ref
3+	1.07	2.38	1.11	0.49
Sex of respondent				
Father	ref	ref	ref	ref
Mother	1.18	1.33	4.27*	9.18*
Mothers' education				
Uneducated	ref	ref	ref	ref
Educated	1.10	0.58	0.64	3.29
Household monthly income (Rupees)				
<5000	ref	ref	ref	ref
5000+	1.68	1.06	1.40	4.83**

Source: GDFHS 1998 M=Male F=Female * p<.05 ** p<.01*** p<.001

Differentials in the likelihood of being reported ill by sex were not statistically significant, but at three sites girls had lower odds than boys of being reported ill. Numbers of children in households are an index of crowding, which has been reported to have a bearing on the health of children (D'Souza 1997, 1999, Agha 2000). In an interview at DHQ Hospital, Bahawalnagar, a doctor said: "Crowding affects (the health of) both male and female children equally". Although the chances of a child being reported ill increased with an increase in the number of children at three out of four survey sites, no differentials were statistically significant.

Gender of respondent was an important predictor of a child's being reported sick. At all four survey sites the odds of a child being reported sick were greater if the

respondent was its mother. The differentials were statistically significant in Bahawalnagar, but not in Lahore. The probable reason is that men in Lahore are likely to be more involved in the health care of their children because of the metropolitan nature of the city. Another reason could be their higher education levels, which may have contributed to greater awareness of ailments at home. On the other hand, in underdeveloped Bahawalnagar, women appear to be more involved in the health of their households and men, by comparison, are less aware of household health issues.

Mother's education is expected to influence reporting of ailments because better educated mothers are likely to be more attentive to ailment symptoms (Sathar and Mason 1989, Caldwell and Caldwell 1993, Mayer 1999). Differentials, however, were not statistically significant. In urban Lahore and rural Bahawalnagar, where women were respectively especially likely, and especially unlikely, to be educated, mother's education had a positive effect on the odds of a child being reported sick. But it had an inverse effect in rural Lahore and urban Bahawalnagar, where the division between educated and uneducated women was more even, and education may have generated better preventive health care.

Household incomes are extremely variable (Lyon and Fischer 1997), and are expected to influence health behaviours. It is possible that illness is more prevalent among the poor, but that they are expected to be more stoical and are less aware of some ailments than their higher income counterparts. They may ignore some ailments because of the cost of seeking treatment and more tolerant general attitudes towards health. Because of this, the reporting of children as sick in poor households can be lower than in high income households. In rural Bahawalnagar, the odds of reporting a child sick increased almost five times if the respondent was from a high income household. The odds of reporting a child sick were higher for high income households at the other three survey sites as well, but not significantly so.

7.4 Health Services Use

The health of females is recognized as an important goal to pursue (UNICEF 1988, Ahmed 1994) and health care services use influences the health of populations significantly (UNICEF 1990, Sundari 1992, Wijk et al. 1996, FBS 1998b, Zimmerman

and Hill 1999) Among infants, more male than female babies die, because of the genetic composition of the two sexes, but greater female than male mortality among children aged 1-4 years is generally attributed to socio-cultural factors. The most important source of differential survival of male and female children lies in differential access to and use of health services, qualitatively and quantitatively. Nutritional and feeding discrimination is reported from South Asia, but has limited differential effect on the health of males and females (Aziz 1990, United Nations 1996).

Gender-based bias in preventive medication like immunization is also reported, but it is argued that differentials in the use of curative health services are large and widespread. It is suggested that differential use of health care services is the main mechanism through which boys survive more frequently than girls (Timaeus et al. 1996 cited in United Nations 1996). Qualitative evidence from focus group discussions and in-depth interviews with health care providers in this study supports this notion that male children receive better-quality health care. Moreover, delay in seeking health care for females may have important consequences for their health and survival compared with that of boys. In the following sections, the use of preventive and curative health care services is examined for evidence of gender and other differentials.

7.4.1 Immunization

Immunization of children against a variety of diseases, like polio, measles and tetanus, affects children's health and mortality (WHO 1984, CDC 1999, Safdar 1999). Rates of immunization are expected to vary across survey sites owing to a skewed provision of immunization services. There have been some reports of undue gender differentials in immunization. For example, the United Nations (1996) indicated significant gender differentials in immunization in Pakistan. However, a recent national survey found that there were no significant gender differentials in immunization in Pakistan (Hakim et al. 1998).

In the present survey, respondents were asked to report the immunization status of their children. Table 7.5 shows percentage distributions of children aged 1-4 years by immunization status, by region, urban-rural residence and gender of child. The question asked aimed to ascertain up-to-date immunization statuses of children. If all shots for the age of the child were reported to have been administered, he/she was considered to have

complete immunization. Some respondents did not report complete immunization, and their children were coded as having partly complete immunization. The data show regional and urban-rural differentials, but no significant gender differentials in immunization were reported for any survey site, although all differentials favoured males.

Table 7.5 Percent distributions of children aged 1-4 years by immunization status , by region, urban-rural residence, gender of child and gender of respondent

	Lahore				Bahawalnagar			
	Urban		Rural		Urban		Rural	
Immunization	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**
				Fathers				
Completed	100.0	91.1	57.4	68.4	92.2	87.2	81.5	83.3
Partly-completed	0.0	4.4	5.9	1.8	2.0	2.1	7.6	3.8
Not at all	0.0	4.4	36.8	29.8	4.9	9.6	7.6	11.5
Don't know	0.0	0.0	0.0	0.0	1.0	1.1	3.3	1.3
Total	100	100	100	100	100	100	100	100
N	**40**	**45**	**68**	**57**	**102**	**94**	**92**	**78**
				Mothers				
Completed	84.2	79.2	51.1	30.2	82.1	76.4	68.9	64.7
Partly-completed	13.2	12.5	46.8	65.1	12.5	23.6	28.9	33.8
Not at all	2.6	8.3	2.1	4.7	3.6	0.0	2.2	1.5
Don't know	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0
Total	100	100	100	100	100	100	100	100
N	**38**	**48**	**47**	**43**	**56**	**55**	**45**	**68**
				Total				
Completed	92.3	84.9	54.8	52.0	88.6	83.2	77.4	74.7
Partly-completed	6.4	8.6	22.6	29.0	5.7	10.1	14.6	17.8
Not at all	1.3	6.5	22.6	19.0	4.4	6.0	5.8	6.8
Don't know	0.0	0.0	0.0	0.0	1.3	0.7	2.2	0.7
Total	100	100	100	100	100	100	100	100
N	**78**	**93**	**115**	**100**	**158**	**149**	**137**	**146**

Source: GDFHS 1998 M=Male F=Female * p<.05 ** p<.01*** p<.001

It should be noted that these data are based on respondents' memories. Households should normally have an immunization card for each child, but these cards are often hard to find and cumbersome to witness during the interview process. Secondly, many men were interviewed at workplaces or on farms, and asking for immunization cards was not practical. Therefore, there may be inaccuracies in the data due to recall problems, but other survey data collected by inspecting immunization cards suggest no significant difference in findings between card-based and memory-based studies (United Nations 1996, Langsten and Hill 1998). It is thus safe to argue that there were no important gender differentials in immunization, although significant urban-rural differentials were found.

In urban Lahore, among children aged 1-4 years, 92.3 percent of males and 84.9 percent of females were completely immunized. The corresponding figures in urban Bahawalnagar were 88.6 percent and 83.2 percent respectively. Lower proportions of children from rural areas of the two districts were completely immunized, but significant gender differentials were not found at these survey sites either. In rural Lahore, 54.8 percent of male and 52.0 percent of female children were completely immunized. The corresponding figures for rural Bahawalnagar were 77.4 percent and 74.7 percent.

In rural Lahore, 22.6 percent of male and 19.0 percent of female children were reported to be not immunized at all. The bulk of these reports of no immunization were given by fathers, and may reflect their lack of awareness. Secondly, people here are poor and depend more upon government-provided immunization services. Mobile immunization teams come and go, and the villagers may have missed opportunities for vaccination of their children.

Private vaccination facilities are available in towns around villages, but cost and travel may have deterred people from vaccinating their children at these places. Lower immunization rates in rural Lahore than in rural Bahawalnagar are understandable because remote villages are solely dependent upon mobile teams and readily have their children immunized when the opportunity arises, seldom receiving such a free and convenient service.

In rural Lahore around 30 percent of fathers reported no immunization of their sons and daughters compared with less than five percent of mothers. This may be due to the fact that fathers had usually gone to work when mobile immunization teams arrived in

the village. Therefore, they may not have been aware of the immunization of their children. At the same time, large proportions of mothers from rural Lahore reported partly-completed immunizations of their children. Mothers are expected to know whether children have received all their immunization shots or have missed some. Hence, they reported partly-completed immunizations.

Significantly larger proportions of men in rural Lahore (36.8 percent and 29.8 percent) than in rural Bahawalnagar (7.6 percent and 11.5 percent) reported no immunization at all of their sons and daughters ($p<.05$). This may have happened because men in rural Bahawalnagar mostly worked on nearby farms and were aware of vaccinations. On the other hand, many men from the large village in Lahore worked in the neighbouring industrial area or in close-by urban areas. Owing to their absence during daytime, they may not have been aware of vaccinations of their children.

It should be mentioned that mass media could play a more significant role in informing people about vaccination campaigns and the benefits of immunization. It is suspected that, sometimes, vaccination teams arrive unannounced, attempt to do their job, and go. Such a state of awareness about forthcoming vaccination campaigns may have a bearing on the success of immunization efforts. A Mexican study has found that "Promotion activities and messages communicated through the mass media were appropriate to inform mothers to seek immunization services for their children" (Perez-Cuevas et al. 1999:727).

7.4.2 Usual Health Care Provider

Differentials in the type of usual health care provider are reported across communities and between males and females (Sabir and Ebrahim 1984, United Nations 1996). In sex-segregated societies like Pakistan, women are discouraged from using modern health care providers because most of them are males. Secondly, modern health care is expensive, and females may have restricted access to household economic resources due to their low status. Due to the institution of *purdah* (seclusion of women), women feel uneasy sharing their health problems with male doctors. Just as they are labelled in India (Murthy 1982), women in Pakistan may be called 'reluctant patients. Therefore, in the absence of female health care providers, especially in rural areas, many

women use traditional healers, or self-remedies, or simply delay seeking health care. Table 7.6 shows percentage distributions of respondents by type of usual health care provider, by region, urban-rural residence and gender.

Table 7.6 Percent distributions of respondents by type of usual health care provider, by region, urban-rural residence and gender

	Lahore				Bahawalnagar			
	Urban		Rural		Urban		Rural	
	***		***		**		***	
Type of health care provider	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**
MBBS	85.6*	67.1	27.8	23.9	78.6	75.2	30.6	36.8
Quack	3.3	1.2	32.7*	6.7	6.7*	1.9	28.5*	14.1
Dispenser/Chemist	3.7*	21.4	29.8*	61.9	7.1*	17.6	30.2*	44.3
Other	7.4	10.3	9.8	7.5	7.6	5.2	10.6*	4.9
Total	100	100	100	100	100	100	100	100
N	**271**	**252**	**205**	**134**	**224**	**210**	**235**	**185**

Source: GDFHS 1998 M=Male F=Female * p<.05 ** p<.01*** p<.001

The data show significant gender differentials in distributions by type of usual health care provider at all survey sites. In general, larger proportions of men than of women used modern MBBS doctors, but the differential was statistically significant only at one survey site. In urban Lahore, 85.6 percent of men and 67.1 percent of women used MBBS doctors ($p<.05$). The corresponding figures for urban Bahawalnagar were 78.6 percent and 75.2 percent. In rural areas of the two districts, significantly larger proportions of men than of women used quacks (unqualified doctors).

Quacks are usually males, and women do not like to be examined by males. Quacks are a kind of doctor and are inclined to touch and feel the bodies of their patients. Dispensers and chemists, on the other hand, do not do this, and women consequently are more comfortable with them. They rather sell medicines on the basis of reported symptoms or on demand. For those illnesses for which they need to see a doctor, women prefer to travel longer distances to seek health care from female doctors. In a focus group discussion with women in rural Lahore, a participant said: "If we need to see a doctor (a

female doctor), either we have to go to Manga Mandi (about seven kms on one side) or to Raiwind (about 10 km on the other side)".

Culturally appropriate health care services are important for improving the health care of females in all human societies. Caldwell and Caldwell (1991:7) found a clear linking of "cultural and social attitudes to care, and care to health, treatment and survival". Even in a developed country like Australia, a need for women's health centres was felt and several of them were established during the 1970s (Broom 1991). In Pakistan, the absence of female doctors coupled with the sex-segregated culture adversely affects the health of females. These are two of the factors responsible for delays in seeking health care for females. The structure of the prevailing health care system needs overhauling if national health is to be improved (Puentes-Markides 1992, Zaidi 1994).

In a focus group discussion with men in rural Bahawalnagar, a participant said: "Due to poverty, many people do not seek health care". Another participant said: "Non-availability of a female doctor is a problem. There are cases where male doctors developed (illicit) relations with females, and (that is why) some people are reluctant to use male doctors". The first participant agreed and said: "Yes, it is also one of the problems, doctors touch females". It seems that people are reluctant to send females to male doctors. The sex-segregated culture coupled with the scarcity of female doctors is affecting female health adversely.

Consistently, across all survey sites, larger proportions of women than of men used dispensers and chemists. In urban Lahore, 21.4 percent of women and only 3.7 percent of men normally used dispensers or chemists ($p<.05$). The corresponding figures in urban Bahawalnagar were 17.6 and 7.1 percent ($p<.05$). Dispensers or chemists are supposed to sell medicines on the prescriptions of MBBS doctors and, sometimes, quacks. They generally do not have medical qualifications, formal or informal. This is different from the situation in developed countries, where dispensers and chemists are qualified and can legitimately dispense some medications without prescription. In Pakistan they in general are salesmen, just like those in supermarkets. Most importantly, they do not charge for prescribing medicines. The greater use of dispensers and chemists by women in urban Lahore suggests that women there are disadvantaged in the use of quality health care services. At other survey sites, however, women's greater use of

dispensers and chemists is offset not by less use of MBBS doctors, but by less use of quacks.

In a women's focus group discussion in rural Lahore, a young girl aged around 12 years stood by and listened throughout the discussion. When health care provision was being discussed, she interjected and said: "When I get sick, they ask me to go and buy a tablet from the store, and when my brother falls sick, he is taken to the doctor". Her mother, a focus group participant, scolded her and the discussion continued. Similarly, an informal interview with a 13-year-old girl revealed interesting evidence on health care services use. She said:

> If I get ill, I am taken to a local doctor (MBBS), and when my brother falls ill, he is taken to the city (a sort of family doctor who is more experienced and located 15 kms away from home). If he and I both fall ill at the same time, we both are taken to the city doctor.

Such a scenario clearly exemplifies health care discrimination against female children.

Larger proportions of respondents from rural than urban areas used dispensers and chemists. In rural Lahore, 61.9 percent of women used dispensers and chemists compared with 21.4 percent in urban Lahore ($p<.05$). This is expected because qualified health care providers are scarce in rural areas and people are bound to use the available services. Dispensers and chemists are probably the most common health care providers in rural areas.

Geographic and urban-rural variations in health care services use are expected owing to the skewed distribution of health care services. According to 1998 data, there were more government health care providers in Lahore (0.67 per thousand population) than in Bahawalnagar (0.14 per thousand population). These figures include modern MBBS and non-MBBS health care providers, and public sector nurses (Table 7.7). Unfortunately, a breakdown of health care providers by sex and urban-rural location was not given, but it can be expected to be skewed in disfavour of females, especially in rural areas.

In 1993, less than one-third of all registered physicians were female and most of them were located in urban centres (Janjua 1996). Although the ratio of male and female enrolled medical students in 1996 was equitable (50 percent of each sex), many female

doctors did not continue to work after marriage. "In 1996, the only woman DHO (District Health Officer) in the country was in Karachi" (Janjua 1996:11).

Generally, it is expected that nurses typically are females, but many men also are found in this profession. This argument receives support from the fact that the nurse-population ratio is worse than the doctor-population ratio in Pakistan. For example, in Punjab province in 1998, there were 0.109 doctors per thousand population against only 0.066 nurses (Government of Punjab 1998). According to Janjua (1996), in 1996, the nurse-doctor ratio was 1:3. Women, in general, are discouraged from working in public, but the nursing profession is particularly disliked because it involves night shift work. Parents do not like their girls to work at night because it is apt to cause their personal reputations, modesty and chastity to be questioned. Secondly, female health workers feel socially isolated in the context of an 'acute gender imbalance' in the Pakistani health system (Janjua 1996:16). Equitable participation of women in the health sector is critical for improving female health (MacCormack 1992, Ojanuga 1992).

Table 7.7 Numbers of public sector health care providers by region and type of health care provider

	Lahore	**Bahawalnagar**
Population	6,213,000	2,034,000
MBBS doctors	1562	212
Homoeopaths, Hakims, etc.	12	15
Nurses	2567	51
Total health care providers per 1000 population	0.67	0.14

Source: Government of Punjab 1998

Table 7.8 shows percentage distributions of persons reported ill during the month before interview by type of health care provider, by region, urban-rural residence and gender of ill person. The data show that larger proportions of males than females from urban and rural Lahore and from rural Bahawalnagar sought treatment from private MBBS doctors. In urban Lahore, 92.3 percent of males and 67.9 percent of females received treatment from MBBS doctors ($p<.05$). In urban Bahawalnagar, however, 70.3 percent of males and 87.0 percent of females received treatment from MBBS doctors

(p<.05). This may have been the result of higher education and employment among women in urban than in rural Bahawalnagar (see Sections 4.8 and 4.9 in Chapter 4). It may be argued that many women in urban Lahore were also educated and employed, but in urban Bahawalnagar a government staff colony was part of the survey site, and government servants are entitled to free treatment from MBBS doctors. This may have increased the use of MBBS doctors by women in urban Bahawalnagar.

It may be noted that at three survey sites, larger proportions of females than of males received treatment from 'Other' sources like faith healers or self-medication. For example, in urban Lahore 6.9 percent of males and 21.4 percent of females used other sources of treatment (p<.05). Especially in Lahore this greater female use of 'Other' providers largely offset distinctly lower use of MBBS doctors.

Table 7.8 Percent distributions of persons reported ill during the month before interview by type of health care provider, by region, urban-rural residence and gender

	Lahore				Bahawalnagar			
	Urban		Rural		Urban		Rural	
Type of health care provider	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**
MBBS doctor	92.3*	67.9	39.3	29.2	70.3*	87.0	67.6	51.6
Dispenser/Chemist /Quack	0.9*	10.7	56.2	60.7	21.6	9.3	29.4	45.2
Other	6.9*	21.4	4.5	10.1	8.1	3.8	2.9	3.2
Total	100	100	100	100	100	100	100	100
N	**117**	**131**	**89**	**89**	**37**	**54**	**34**	**62**

Source: GDFHS 1998 M=Male F=Female * p<.05 ** p<.01*** p<.001
Note: Separate Dispenser/Chemist and Quack categories could not be produced here because quacks were coded with dispensers and chemists on this question.

The data described above suggest that females, in general, were at a disadvantage compared to males in the use of quality health care services. Table 7.9 shows percentages of sick persons aged 0-9 years and 10 years or over who it was suggested within the household during the month before interview should wait to seek health care by region, urban-rural residence and gender. Delays in seeking health care occurred for larger proportions of females than males in both age groups. Delay in seeking health care is

reported to be the major determinant of high maternal mortality in Pakistan (AbouZahr and Royston 1991, Fikree et al. 1994, Figa-Talamanca 1996, Midhet et al. 1998).

Table 7.9 Percentages of sick persons aged 0-9 and 10+ years who it was suggested should wait to seek health care by region, urban-rural residence and gender of sick persons

	Lahore				Bahawalnagar			
	Urban		Rural		Urban		Rural	
	M	F	M	F	M	F	M	F
	0-9 years							
Suggested to wait	3.8	12.5	8.3*	37.0	0.0	0.0	0.0	0.0
N	26	32	36	27	12	8	6	11
	10+ years							
Suggested to wait	2.4	8.1	21.4	34.5	0.0	8.1	0.0	5.1
N	82	86	42	58	18	37	21	39

Source: GDFHS 1998 M=Male F=Female * p<.05 ** p<.01*** p<.001

In rural Lahore, delays in seeking care were suggested for 37.0 percent of female but only 8.3 percent of male children aged 0-9 ($p<.05$). Gender differentials at other survey sites, however, were not statistically significant, although except among 0-9 year-olds in Bahawalnagar, females were invariably more frequently asked to delay seeking care. A doctor at Children's Hospital, Lahore reported serious delays in seeking health care for girls. The doctor said: "When boys are brought for treatment, they usually are at initial stages of ailments while the girls usually are at advanced stages. Girls are taken to hospitals when they have tried all other (home) remedies, and at times, it is too late". These findings suggest that people delay seeking health care for females, and especially female children, which is likely to have a detrimental effect on their health.

7.4.3 Amounts of Money Paid for Health Care Services

Gender differentials in the quality of health care services used were noted in Section 7.4.2. Economic factors play an important role in determining quality of health care (Siddiqui et al. 1995), and to further assess their influences, amounts of money paid for health care services were recorded. Table 7.10 shows amounts of money paid to health

care providers for treatments received by household members during the month before interview by region, urban-rural residence and patient's gender. It was hypothesized that parents were willing to spend more on the health care of sons than on that of daughters. In an Indian study, "families spent twice as much on health care of boys as for girls in the first two years of life" (Mayer 1999:327). However, the data do not suggest significant gender differentials in money paid for the use of health care services. The medians show that similar amounts of money were paid for the use of health care services for both males and females, except in urban Bahawalnagar where the medians were 300 rupees for males and 200 rupees for females. It will be noted that numbers in Tables 7.8 and 7.10 are slightly different. This is due to missing data on the amounts of money paid to doctors.

Median amounts paid for health care services in Lahore and Bahawalnagar show that people paid less in Lahore than in Bahawalnagar. This is surprising, because Bahawalnagar respondents had lower incomes than their Lahore counterparts. There are more doctors per thousand population in Lahore than in Bahawalnagar, which may have introduced competition in Lahore, reducing fees and costs. Secondly, the higher cost of health care in Bahawalnagar may have deterred some people from seeking it. Owing to low incomes, people may have ignored minor ailments, and only sought treatment when a condition became severe, and more costly to treat. This argument is consistent with lower reported morbidity in Bahawalnagar than in Lahore.

In a focus group discussion with men in urban Lahore, a participant said: "Only poor people discriminate in the provision of health care services to sons and daughters." Similarly, as noted in Section 7.4.2, in another focus group discussion with men in rural Bahawalnagar, poverty was noted as a factor discouraging people from using health care services. In an interview a doctor at DHQ Hospital, Bahawalnagar, talking about health care discrimination between sons and daughters, observed:

> A woman had been receiving treatment for her twin daughters for the last year, and had been insisting on receiving medicines (free of cost) from the hospital. Recently, she came with her new male baby, and immediately asked me to prescribe medicines she could buy from the city (from a private medical store).

It is generally perceived that freely supplied hospital medicines are not of good quality, while medicines bought from medical stores are of better quality. This woman was

willing to use free (perceived low quality) medicines for her daughters, but not for her son.

Table 7.10 Percent distributions of persons ill during the month before interview by amounts of money paid for treatment, by region, urban-rural residence and gender of ill persons

	Lahore				Bahawalnagar			
	Urban		Rural		Urban		Rural	
Rupees	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**
<50	24.1	22.8	45.5	41.9	10.5	5.9	5.9	11.9
50-99	16.7	15.7	12.5	17.4	0.0	15.7	11.8	8.5
100-199	21.3	19.7	17.0	14.0	21.1	23.5	29.4	25.4
200-499	18.5	18.9	13.6	18.6	34.2	29.4	32.4	27.1
500+	19.4	22.8	11.4	8.1	34.2	25.5	20.6	27.1
Total	100	100	100	100	100	100	100	100
N	**108**	**127**	**88**	**86**	**38**	**51**	**34**	**59**
Median	**100**	**100**	**50**	**50**	**300**	**200**	**200**	**200**

Source: GDFHS 1998 M=Male F=Female * p<.05 ** p<.01*** p<.001

The same doctor shared another incident to show health care discrimination between boys and girls. He said:

> My sister lives in Faisalabad with her five daughters and a son. She never sought medical advice (over the telephone from me) for her daughters, but for her son, even for minor ailments, she calls long distance and seeks advice from me. The fact that it costs money to call does not matter (for the sake of her son's health).

Such are the parental health care attitudes towards sons and daughters. They are willing to spend more on the health of their male children than on that of their female children.

7.4.4 Use of Government Hospitals

Table 7.11 shows numbers of children, by sex, who received treatment in three government hospitals located in Lahore and Bahawalnagar Cities. During the course of data collection, a physical counting of male and female children in daily registers of local

government hospitals revealed that substantially larger numbers of male than female children received health care. The periods to which data collected from the three hospitals pertained were different, and are indicated. The data show that decidedly more boys than girls were taken to hospitals for treatment.

At least one-third more boys than girls were treated in each government hospital. It should be noted that these were not referred cases. Rather, the children were generally brought for care by parents on their own initiative. Several doctors in survey areas were also interviewed to gather information based on their experiences. Based on his private practice, a doctor in urban Lahore said: "Approximately 30 percent of children treated in my clinic are girls and 70 percent are boys, and girls are brought in when they are extremely dehydrated". He continued: "People readily get big surgeries done for sons, but they wait for their daughters". A doctor at DHQ Hospital, Bahawalnagar similarly said: "People bring their daughters to hospitals at terminal stages (of their ailments)".

Table 7.11 Numbers of children aged 0-13 years treated in specific government hospitals by gender

Hospital	Male	Female	M/F Ratio
Children's Hospital Lahore (1.6.95 to 22.4.97)	5648	4211	1.34
Sir Ganga Ram Hospital Lahore (1.2.98 to 28.2.98)	337	191	1.76
District Hospital Bahawalnagar (1.1.97-31.12.97)	1128	703	1.60

Source: Data provided by specific hospitals M=Male F=Female

These data clearly show delay in seeking health care for females, and the skewed use of health care services for male and female children is only likely to exacerbate differences in their health. In the context of poverty, overall lack of health services, and gender-based discrimination against females, higher mortality among female children is the logical outcome.

Table 7.12 shows numbers of ill children aged 0-13 years taken to the Children's Hospital, Lahore for care between June 1995 and April 1997 by age and sex. The data show that consistently more male than female children of all ages received treatment. The only exception was age group 13, and the probable reason is female puberty problems, for which people prefer female doctors who generally are readily available in government

hospitals. The table suggests that there is a significant differential in health care practices for sons and daughters.

Table 7.12 Numbers of ill children aged 0-13 years taken to Children's Hospital, Lahore for care by age and gender, 1997

Age	Male	Female	M/F Ratio
0-7 days	18	13	1.38
8-30 days	90	54	1.67
1-11 months	1231	851	1.45
1 year	861	574	1.50
2 years	575	393	1.46
3	510	343	1.49
4	394	317	1.24
5	354	270	1.31
6	277	243	1.14
7	289	259	1.12
8	218	180	1.21
9	277	225	1.23
10	171	134	1.28
11	198	163	1.21
12	125	116	1.08
13	60	76	0.79
1-4	**2340**	**1627**	**1.44**
5-9	**1415**	**1177**	**1.20**
10-13	**554**	**489**	**1.33**
Total	**5648**	**4211**	**1.34**

Source: Children's Hospital Lahore 1998 (Unpublished data) M=Male F=Female

Doctors at this hospital, as at others, were wary about the differential attitudes of parents towards their male and female children. One doctor was of the view that there were more female than male child LAMA (left against medical advice) cases. He could not produce data at that point, but thought that more people took their daughters away than took their sons away against advice.

These data clearly demonstrate that people implicitly discriminate between sons and daughters when seeking curative health care. Curative care is usually expensive, and poverty seems to be playing a role in gender-based discrimination in health care services use. These are the implicit socio-medical mechanisms through which higher mortality among girls than among boys aged 1-4 occurs in Pakistan. Therefore, it is important to

understand the social and economic dynamics of differentials in the use of curative health care services, and to address them appropriately.

Table 7.13 shows numbers of ill children aged 0-13 years taken to DHQ Hospital, Bahawalnagar for care during 1997 by month of the year and sex of child. Similar to the evidence in Table 7.12, larger numbers of male than female children were taken to DHQ Hospital for care. Overall, 60 percent more boys than girls received treatment, and consistently larger numbers of boys than girls received medical care during most individual months. Only during May were larger numbers of girls than boys treated. The doctors at this hospital, as at others, were aware of parental discrimination in the provision of health care services to sons and daughters.

Table 7.13 Numbers of ill children aged 0-13 years taken to District Headquarters Hospital, Bahawalnagar for care during 1997 by month and gender

	Numbers treated		
Month	**Male**	**Female**	**M/F**
January	70	39	1.79
February	66	24	2.75
March	84	58	1.44
April	110	56	1.96
May	53	98	0.54
June	127	93	1.36
July	131	49	2.67
August	101	66	1.53
September	90	49	1.84
October	88	58	1.51
November	97	57	1.70
December	111	56	1.98
Total	**1128**	**703**	**1.60**

Source: District Headquarters Hospital Bahawalnagar 1998 (Unpublished data) M=Male F=Female

In an interview, the doctor in-charge of the Children's Ward at the DHQ Hospital, Bahawalnagar talked about a mother discriminating in health care provision between her only son and several daughters. The doctor said to the mother enquiringly: "You have brought your son to me but never brought any of your daughters?" She allegedy replied: "I take them somewhere else". Clearly people discriminate between sons and daughters

regarding health care provision, and differential mortality between young boys and girls can easily be attributed to different levels of health care provided to them.

According to a doctor at DHQ Hospital, the prevalence of illness among male and female children should be similar. He said: "Overcrowding will affect the health of male and female children equally", so that assuming the same prevalence of illness among male and female children, differentials in treatment show a gender bias in health care. Parental bias is clear from a focus group discussion with men in urban Lahore as well. A participant said: "There are more male than female doctors, and girls are shy to share their problems with male doctors. If there were more female doctors, more girls would seek health care". It is mothers normally who take their children, especially their daughters, for health care. Mothers' own reluctance to seek care from male doctors probably contributes to their reluctance to take their daughters to selfsame doctors.

When data from the hospital register in Lahore were being gathered, the Registrar at the Children's Ward of the Ganga Ram Hospital was surprised to learn of the gender imbalance among child patients in his ward. He said: "We didn't know about these differential proportions of male and female children being treated", and continued by saying, "that means we don't discriminate". Reflecting on his experience as Registrar of the Children's Ward and Duty Doctor, he said: "Care in government hospitals is free, but patients have to procure medicines themselves. When we look for parents to give out prescriptions to buy medicines, we can find parents of male children more easily than those of girls".

Most of the doctors interviewed in Lahore and Bahawalnagar felt that when girls were brought for care, they were already at more advanced stages of illness compared to their male counterparts. The doctor-in-charge at DHQ Hospital, Bahawalnagar said: "Parents of boys are more easily convinced to admit them than those of girls". These parental and social attitudes towards the health care of females can be expected to influence the mortality of male and female children. The following section looks at data on mortality collected for the two years before the survey.

7.5 Mortality

Differential use of health care services is likely to have a consequential effect on incidence of mortality (Bardhan 1987, LeVine et al. 1991, Bicego and Boerma 1993). A set of questions was asked to assess mortality that had occurred in the household during the two years before interview. In total 59 deaths were reported, 30 of females and 29 of males. Age was not recorded for 19 deaths, 9 males and 10 females. It is highly likely that these 19 deaths occurred at very young ages, right after birth or during the first few months. Table 7.14 shows numbers of deaths that occurred in households during the two years before interview by region, age at death, urban-rural residence and gender. Among infants, one boy and one girl died, and if the 19 'age unknown' deaths were infant deaths they, too, were evenly split by gender.

Table 7.14 Numbers of deaths occurring in households during the two years before interview by region, urban-rural residence, age at death and gender of deceased

	Lahore				**Bahawalnagar**			
	Urban		**Rural**		**Urban**		**Rural**	
Age	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**
<1	0	0	0	0	0	1	1	0
1-4	1	0	0	2	0	7	3	3
5-9	0	1	1	0	0	0	1	1
10-14	1	0	0	0	0	0	0	1
15-44	4	2	0	1	3	1	1	1
45+	0	0	3	0	0	0	0	0
Unknown	2	1	2	2	2	2	4	4
Total	**8**	**4**	**6**	**5**	**5**	**11**	**10**	**10**

Source: GDFHS 1998 M=Male F=Female

However, the gender differential among children aged 1-4 years is worth noting. There were four male and 12 female deaths in this age group. This ratio of male-female deaths is in line with recent literature that suggests higher mortality among female than male children aged 1-4 years (NIPS 1992, Hakim et al. 1998, Tinker 1998). Among

children aged 10-14, a boy and a girl were reported to have died. Among people aged 15 years and over, 16 deaths were reported, 11 males and five females.

It is worth noting that among children aged 1-4 years, seven deaths occurred in urban and six in rural Bahawalnagar. On the other hand, only one death in urban and two in rural Lahore were reported. These figures suggest that child mortality is higher in Bahawalnagar than in Lahore. This differential can be attributed to the scarcity of modern health services in Bahawalnagar. Once a child is seriously sick he/she needs advanced medical care, and poor people in Bahawalnagar are deterred from using expensive medical care. Secondly, the available health care facilities in underdeveloped Bahawalnagar are sometimes inadequate to dealt with such complex medical cases.

Higher child mortality in Bahawalnagar may be viewed in the context of the overall socio-economic status of the two districts. In socio-economic ranking, district Lahore District rated number one while Bahawalnagar was ranked 46 out of 94 in a 1996 study conducted by the Pakistan Institute of Development Economics (PIDE 1996). A brief discussion of the comparative socio-economic profiles of the two districts was given in Section 3.2.1 in Chapter 3. In line with this district ranking, the present survey revealed large disparities in incomes and education between the two districts. Given such a comparative socio-economic picture for the two districts, it is not surprising that larger numbers of child deaths were recorded in Bahawalnagar than in Lahore.

Table 7.15 shows numbers of deaths of children aged 0-13 years in DHQ Hospital Bahawalnagar during 1997 by month of the year and sex of child. The data show 73 male deaths per thousand admissions and 80 female deaths per thousand admissions. In focus group discussions with men in Lahore and Bahawalnagar, people did not acknowledge deliberate discrimination between sons and daughters. However, some participants admitted that poor people discriminate in the use of health care for sons and daughters (see Section 7.4.2).

A medical officer at DHQ hospital Bahawalnagar talked about LAMA (left against medical advice) cases. He was of the view that people sometimes discharged their female children against medical advice, but rarely their male children. He said: "Recently a seriously sick girl was admitted to this ward in the morning. Her father came in the evening and had her discharged. The girl's mother cried (protested), but he insisted and took the girl home". On being questioned about the nature of her condition, the doctor

said: "There were boils on her whole body, which could be fatal." During the course of the interview, this doctor became critical and said:

> People bring their daughters when they are at terminal stages; they bring them when they feel that friends and relatives would ostracize them (for not treating a daughter). They bring them for our (doctor's) stamp that they died at the doctor's (hospital). If it is a son, they are over-conscious. Even with a minor (health) problem, they run (to us)".

In line with these findings, higher mortality among female children should not come as a surprise, and appropriate social and economic interventions are necessary to address this serious gender-based health issue.

Table 7.15 Numbers of children aged 0-13 years dying at District Headquarters Hospital, Bahawalnagar during 1997 by month and gender

	Number of deaths		
Month	**M**	**F**	**M/F**
January	11	6	1.83
February	5	1	5.00
March	7	4	1.75
April	2	6	0.33
May	5	3	1.66
June	9	10	0.90
July	6	2	3.00
August	10	4	2.50
September	7	3	2.33
October	3	5	0.60
November	9	9	1.00
December	8	3	2.66
Total	**82**	**56**	**1.46**
Admissions	**1128**	**703**	**1.60**

Source: District Headquarters Hospital Bahawalnagar 1998 (Unpublished data) M=Male F=Female

In the following section, maternal mortality is discussed. No data were collected on maternal mortality during this survey, but maternal mortality is an important aspect of women's lives in Pakistan. Owing to the synergic link between high fertility and maternal mortality, the health of children also suffers. Maternal mortality is a significant health issue, and should be addressed both social and medically.

7.5.1 Maternal Mortality

Many women in developing countries die prematurely because of childbearing complications and because of lack of reproductive care. According to a World Bank report on the women of Pakistan, the "majority of maternal deaths occur during or soon after birth, caused by hemorrhage, sepsis (severe infection), toxemia (caused by high blood pressure and can lead to convulsions and death if not treated), obstructed labor and primitive methods of abortion" (World Bank 1989:51). High fertility rates, closely spaced pregnancies and the circumstances under which births take place at home are the major causes of high maternal mortality. In 1980, between 600 and 650 Pakistani women per 100,000 live births died from complications related to pregnancy and childbirth, compared to 500 in India and 90 in Sri Lanka (World Bank 1989:48). The corresponding figure for the developed world was only ten, suggesting a 60 times greater risk of dying for Pakistani women than for women in developed countries. The major reason for this vast difference is the larger number of births that take place at home, 83 percent during 1993-94 to 1996-97 (Hakim et al. 1998 :184), attended only by untrained traditional birth attendants or older female relatives. The maternal death rate in rural areas is likely to be higher than in urban areas owing to the more meager health facilities. Pervasive poverty and massive ignorance contribute to high maternal mortality. Recent estimates suggest a reduction to 340 maternal deaths per thousand live births (UNICEF 1998). Some experts, however, believe that the maternal mortality rate is much higher than this (Tinker 1998). According to the 1995-96 PIHS, the maternal mortality rate in Pakistan is still 650 deaths per 100,000 live births (FBS 1997:43).

Socio-economic, cultural and biological factors are said to be important determinants of maternal mortality (McCarthy and McCain 1992). However, nearly three-fourths of maternal deaths in Pakistan are attributed to lack of access to obstetric care in Pakistan (Midhet et al. 1998). Availability of female rather than male health care providers for obstetric problems is identified as an important requirement for reducing maternal mortality (Poovan et al. 1990, Fauveau et al. 1991, Figa'-Talamanca 1996). In a Pakistani study, distance to nearest obstetric health care facility was linked with maternal mortality (Midhet et al. 1998). Non-availability of female staff at these health care facilities was also noted as a significant issue. According to Pervez et al. (1993), "40 percent of Peripheral Health Care facilities in Pakistan do not have a LHV (lady health

visitor) appointed". It may be argued that the provision of culturally appropriate health care facilities for obstetric care is vital to reducing maternal mortality in Pakistan.

Abortion is a culturally sensitive health issue (Chhabra and Sheel 1994, Midhet et al 1998). Abortion is illegal in Pakistan, other than in exceptional circumstances like when there is danger to the mother's life. However, abortions almost certainly are being performed illegally. Data do not exist, but an Indian study suggests that for every legal abortion, ten more abortions are performed illegally (World Bank 1996:30). Although the abortion rate may not be the same in Pakistan as in India, large numbers of illegal abortions are likely to occur in Pakistan as well. Illegal abortions are generally performed haphazardly in unhygienic conditions using primitive technologies, with high maternal mortality resulting.

7.6 Conclusions

Chapter 6 showed that substantially larger proportions of women than of men reported 'fair-to-poor' health at all survey sites. Morbidity information provided in this chapter supports that finding. Consistent with the hypothesis incorporated in Figure 2.1, generally speaking larger proportions of women than of men reported illness during the month prior to interview. There were instances where this differential did not emerge. For example, among household members aged 50+ years in urban Lahore a larger proportion of men than of women reported illness during the month prior to interview. But overall, morbidity data confirmed the poorer health status of females.

Evidence presented of relative delay in seeking health care for females suggests greater suffering for women. This finding also is consistent with women having reported poorer self-assessed health and having, for the most part, more often experienced illness during the month prior to interview. Discriminatory health care practices and differential mortality levels by gender among children aged 0-9 fit well with the model presented as Figure 2.1. Among children aged 0-9 years, 15 girls and only seven boys had died during the two years prior to interview, with 12 girls and only four boys dying aged 1-4. However, of 16 deaths at ages 15 and older, 11 had been male deaths, including eight of 13 at ages 15-44. These numbers are small, but certainly provide no evidence of excess female mortality at ages where maternal death is a gender-specific risk. Perhaps that risk

is more than offset by excess male risk from causes associated with men's employment and daily participation in public life, but a much larger scale study is needed to fully resolve this issue.

The findings that more adult men than women had died during the two years prior to survey, while the general health status of adult women was poorer than that of their male counterparts, perhaps appear somewhat contradictory. The small number of deaths underpinning the former finding requires it to be treated cautiously, but evidence for Pakistan as a whole of excessively high female child mortality (Table 2.1) in conjunction with slightly higher female than male life expectancy at birth (Table 1.3) lend it some credence. There is limited recent evidence of excess male mortality in infancy (Table 2.1), so that the male mortality excess needed to both compensate for high female child mortality *and* produce a longer female life expectancy at birth could well occur at adult ages. It may be, therefore, that Pakistan is a country in which the *general* health of females is distinctly poorer than that of males, but not to the point of producing a shorter expectation of life. In other words, the relatively poor health of Pakistani women primarily reflects their poorer *quality* of life, which overwhelmingly manifests itself in ailments that are not life threatening.

The differential use of health care services by males and females presents a disconcerting picture. Female children, in general, are at a disadvantage. Data from government hospitals showed that larger numbers of boys than girls received health care. Focus group discussions with men and women confirmed that female children received less adequate health care than their male counterparts, and interviews with doctors also suggested that female children received less and poorer quality health care. Doctors further reported serious delays in parental decision-making over the health care of female compared to male children. Data on whether seeking health care had been delayed showed that females, adults as well as children, were at a disadvantage. There is also some evidence that adult women receive poorer quality health care than is received by adult men.

High morbidity coupled with inadequate use of health care services by females results in poorer health status. In such circumstances, higher female than male mortality among children aged 1-4 years should not come as a surprise. Public attitudes towards the health care of male and female children differ significantly. It is a vital social issue, and

needs to be addressed socially, not medically, although improvement in health care facilities is important, and will improve the health of both sexes.

Chapter 8

Summary, Conclusions, and Implications

8.1 Summary

This study has developed three themes. First, that there are substantial differences in the social and economic statuses of males and females in both urban and rural communities of Punjab, Pakistan. These differences are so intensive and extensive as to present as gender inequities rather than inequalities. Second, that gender differentials in self-assessed health in both urban and rural communities are huge, and are the product of gender inequalities that pervade local socio-cultural systems. Third, that although significant gender inequalities in the provision of health care services could not be established from the household survey data, ample qualitative and hospital evidence points to discriminatory parental health care-seeking practices in respect of male and female children that must have an adverse impact on the health of girls.

Although the economic activity rate among women has increased during the last three decades, women's employment in the formal sector has either stagnated or declined since 1978. Traditional structures have never approved of women's work in the public domain, and the policies of recent governments have intensified those biases. General security, especially of females in public, has emerged as an important social issue in the last two decades. Domestic and public violence against women has increasingly been reported, with the growing incidence of rape, especially of minors, having increased security concerns (RCIW 1997, HRW 1999). These socio-structural trends have further depressed the status of females.

The low status of females has a battery of effects on their lives, including that on their health. Society is less willing to spend resources on females, because to do so is perceived as uneconomical. This is evident from their low schooling and literacy rates. Similarly, people appear to discriminate on the basis of gender in the provision of heath care services, this having a detrimental effect on the health status of females. The differential use of health care services by males and females emerges from several directions: (a) parental discrimination in their use; (b) cultural encouragement of females

to seek care only from female health care providers; (c) mobility constraints on women for security reasons; and (d) men discouraging women from utilising available health care services.

The present study suggests that geographic and gender differentials in health are pervasive. Cultural variation in terms of reporting various illness episodes may be a significant determinant of substantial differentials in health between Lahore and Bahawalnagar districts. For example, 14-16 percent of children aged 0-4 in the four gender/survey site combinations in Lahore were reported to have been ill during the month prior to interview compared to only 5-8 percent in the four gender/survey site combinations in Bahawalnagar. This differential parental reporting of illness among children in the two districts may partly be explained by the fact that respondents in Lahore were in general more educated than those in Bahawalnagar. Educated parents are expected to be more aware of and attentive to various ailment symptoms, and accordingly the parents from Lahore may have been more inclined to report illness than those from Bahawalnagar. Despite geographic differences in reported illness among children, however, gender differences in reports of morbidity were not significant.

Among adults, generally a larger proportion of women than of men reported illness during the month prior to interview, although in rural Lahore a significantly larger proportion of men (11 percent) than of women (only two percent) aged 50+ years did so (Table 7.2). The data therefore suggest that the frequency of reported illness among male and female children was similar, but that among adults, in the main, women were significantly more likely to have recently been ill. This higher reported morbidity among adult females is probably attributable to excessive childbearing, excessive domestic workloads, and oppressive social environments both at home and in public.

In terms of self-assessed health, double or more the proportion of adult women than adult men reported 'fair-to-poor' health. These complementary data suggest that the health of adult females is clearly poorer than that of their male counterparts. Gender differentials in health may have been influenced by cultural expectations of women being more sickly due to their reproductive biology. But the huge gender differentials in self-assessed health are unlikely to be explained solely through cultural or structural variables. Multivariate analysis suggests that women perceive themselves to be sicker than their

male counterparts. Inadequate and poor quality health services are used by many females, and such a situation adds misery to their lives, especially in lower socio-economic strata.

The health care delivery system in the under-developed district of Bahawalnagar is weak, and consequently has a negative impact on the health of both men and women. However, discriminatory use of modern health care services by males compared to females, as evidenced by in-depth interviews with doctors at the District Headquarter Hospital, produces a health disadvantage for women and girls.

8.1.1 Review of Findings against Study Objectives

The first objective of this study was to assess gender and other differences in potentially health-related variables like son preference, education, income, marriage practices, autonomy of women and religiosity, and health differentials between the two study districts and between their urban and rural populations. Son preference is endemic in South Asian societies. It adversely affects the social status of females, and understanding the dynamics of son preference is vital to understanding the root cause of the low social status of females in Pakistan. In the context of the recent economic slow-down in Pakistan, son preference continues and probably has intensified. In the present study, large proportions of men and women desired a son for their first child. Although son preference may decline with increasing numbers of sons in families, it continues to be strong after several sons have been born (Arnold 1997, GDFHS 1998).

Substantial proportions of respondents from all survey sites were happy for their first child to be of either sex, indicating some level of acceptance of daughters. However, they expressed a definite preference for sons far more often than for daughters. Son preference in South Asian societies is not new, but its links with social status and the health of females lack research and understanding.

Son preference has its roots in the traditions of local social systems and culture. The socio-cultural requirement to give dowries when daughters marry is an important component of those traditions. Owing to depressed economic conditions and a demand for larger dowries, the dowry problem appears to have intensified (Sathar and Kiyani 1998). A Bangladesh study has found an increase in dowry demand in recent years (Amin and Cain 1995), and a similar trend is likely to have occurred in Pakistan as well.

Therefore, marriage-related expenses continue to influence son preference and cause the status of females in Pakistan to be low.

In addition to marriage-related concerns, this study has found that parents are more anxious about aspects of the future lives of their daughters than about those of their sons. They remain concerned even after marriage due to risk of potential future problems. The greater number and intensity of concerns about the lives of female children are likely to push parents to avoid female children, for example through sex-selective abortion, or more commonly to resent them. From marriage and security-related concerns, parents want to marry their daughters sooner rather than later, which increases their fertility and adversely affects their health and social status. Son preference is a major factor underpinning the continuing low social status of females in Pakistan.

Both male and female respondents in Bahawalnagar showed a greater preference for sons than did those in Lahore. Rural areas of the two districts showed a greater preference for sons than their urban counterparts. More men than women in urban Lahore, and more women than men in rural Lahore, preferred sons. In urban and rural Bahawalnagar slightly larger proportions of women preferred sons (see Table 5.2 in Chapter 5). Except that in urban Lahore a larger proportion of men than women preferred sons, these findings were expected. The urban Lahore exception is interesting, and may be interpreted in the light of a focus group discussion with men there. Participants were assertive in claiming that daughters were a source of tension due to prevailing socio-cultural conditions, and it is only logical that men should have reported a greater preference for sons than their female counterparts.

The major reasons for son preference were social expectation and economics. Understandably, more men than women reported economic pressure as a reason for preferring sons. On the other hand, more females than males reported social expectation as a reason for preferring sons. Economic reasoning was more frequently reported in Bahawalnagar than in Lahore. Men, mostly, are breadwinners in Pakistan, and their economic reasoning for son preference is logical. Women are more traditional in their social attitudes, and hence their reporting social expectation as the most important reason for son preference also stands to reason. Bahawalnagar, being a poorer district than

Lahore, was expected to be more strongly economically motivated in favour of son preference.

People want higher levels of education for their sons than their daughters. Larger proportions of mothers than fathers wanted higher education for their children. Larger proportions of urban than rural residents wanted higher education for their children. The major reason for desiring less education for females was their domestic role. Lower proportions of men and women in Lahore than in Bahawalnagar reported the domestic role of women as a reason for their lower desired education for daughters. These findings generally are as expected, but it is interesting that significantly larger proportions of women from urban Lahore than from other survey sites want good educations for their daughters is interesting. In the light of focus group data collected from these women (see Section 5.4.1), it can be argued that some of them wanted employment-oriented or professional educations for their daughters.

Marriage is an important social institution in Pakistan and a lot of human activity revolves around it. Marriages are usually arranged by parents, and first-cousin marriages are common in urban and rural areas of the two districts. Nearly two-thirds of respondents in rural Bahawalnagar and three-fifths of those in urban Lahore were married to first cousins. Over 90 percent of marriages occurred within caste at all survey sites. However, respondents from different survey sites had rather different views on the most appropriate types of marriage for their offspring. Large proportions of respondents favoured marriages within caste, but cousin marriages were less favoured by women than men. This is interesting. Women are the ones most adversely affected by mismatched cousin marriages in a male-dominated culture. Some female respondents were probably keen to broaden the choice of spouses for their daughters because the chance of finding a compatible non-cousin spouse was greater than that of finding a compatible cousin spouse. In the patriarchal Pakistani culture, for example, many educated girls are married to illiterate cousins. Mothers may have been especially keen to see their daughters spared from such situations.

People prefer to marry their daughters at younger ages than their sons because they like to ensure the employment of sons and want to marry their daughters off since they are perceived as social and economic burdens. Generally, however, they wanted to

marry their children at older ages than when they themselves married. This portends a rising age at marriage for both males and females. Ideal ages at marriage in rural areas were lower than those in the respective urban areas (18 years versus 20 years in both regions). This reflects parental desire for girls to be better educated in urban than in rural areas.

Autonomy of women varied significantly between urban and rural areas. This is understandable because rural women are more constrained than their urban counterparts. Tradition is more dominant in rural than in urban areas because of poverty, low education and low exposure to modern forces for change like media and travel. There was greater freedom of movement in urban than in rural Lahore. However, in Bahawalnagar a larger proportion of rural than of urban women reported high freedom of mobility.

Women, in general, are much more religious than their male counterparts. Religiosity is widely regarded as an important tool for preserving tradition, and women, in general, provide the basic means for preserving tradition through their 'engenderment' of young children. The greater religiosity among women is functional for patriarchal structures. Surprisingly, however, religiosity was lower among both men and women in rural Bahawalnagar than at other survey sites.

The second objective was to assess gender-differentiated concerns of respondents about various aspects of their children's lives. Section 5.7 in Chapter 5 discussed gender-based concerns about sons and daughters. People were more concerned and wary about various aspects of the future lives of their daughters than about those of their sons, because daughter-related problems are more serious for parents. The major concern about daughters was marriage, and that about sons was employment. People were concerned about the education of all of their children, but were more concerned about the education of their sons owing to its role in employment. Mothers compared with fathers were more concerned about the education of daughters, seeing it as means of improving their marriage prospects. Socio-cultural aspects of daughters' marriages were quite powerful influences on people in varying ways.

People were more concerned about the morality and potential for straying of their sons, and were also more concerned with the health of their sons. On the other hand, they were more concerned about the security and religious education of their daughters.

Differences between males and females, as discussed in Chapter 5, are so intensive and extensive as to be viewed as gender inequities rather than gender differences. These inequities are rooted in local socio-cultural systems. Table 5.22 in Chapter 5 showed gender-related sayings (comments) recorded during fieldwork. This list of common social attitudes showed deep-rooted cultural biases against females. It is a powerful depiction of prevailing socio-cultural predispositions towards males and females. The list also contained a few sayings in favour of females. For example, "heaven is under mothers' feet" is a significant one, and carries a lot of social value in the Pakistani social system. However, there are many more cultural biases against females than in favour of them. These biases influence the lives of both males and females. Their impact on females from different classes may vary in intensity, but for the vast majority of poor women, their net impact is health damaging.

8.1.2 Self-assessed Health of Respondents

The third objective was to assess the health status of respondents as measured by the self-perceived health status of male and female respondents. The health status of respondents was measured in Chapter 6 by a direct, broad question, 'How is your health in general?'. Although self-assessed health as a measure of health status has the weakness of subjectivity, it is increasingly used in both developed and developing countries. In a recently released report based on 1990-94 data, the NHSP has used self-assessed health to show gender and urban-rural health differentials. In general, in line with international experience, larger proportions of women than of men reported their health 'fair-to-poor' in the NHSP. Self-assessed health as a measure of health seems to be valuable, because significantly larger proportions of respondents who reported their health 'fair-to-poor' than of those who reported their health as 'very good-to-good' also reported some sort of chronic ailment.

Self-reports of health incorporate psycho-physical aspects of health, which are important in a Pakistani context where large proportions of women are abused by their husbands. Between one-quarter and one-half of women from different villages in rural Punjab, Pakistan are reported to have admitted ever being abused by their husbands (Sathar and Kazi 1997). Admitting domestic abuse is difficult, and the actual prevalence

of family violence is expected to be higher. A recent study by Human Rights Watch has estimated that nearly 85 percent of Pakistani women are abused by men in the privacy of their families and homes (HRW 1999). In such an adverse gender environment, self-reported health is even more useful to assess the health status of females in Pakistan.

In line with the NHSP and international trends, significantly larger proportions of women than of men in the present study reported their health 'fair-to-poor'. Large proportions of women doing so, and doing so at comparatively young ages, is a marker of continuing ill-health among large numbers of women in Pakistan. Women's high level of self-reported 'fair-to-poor' health also points towards an overall poor quality of their lives as compared to those of men.

Psycho-physical aspects of self-assessed health probably have contributed to the high level of reported 'fair-to-poor' health by women. For example, the largest proportion of women (over four-fifths) to report 'fair-to-poor' health were in rural Lahore, and data on domestic violence showed 48 percent more women in rural Lahore than in any other survey site to have admitted physical abuse by their husbands. In rural Lahore, some women worked in factories located in an adjacent industrial area. Men in the village, in general, did not like women working in factories and the resultant destabilization of local gender structures. This instability of gender structures probably contributed to the tense social environment in the village, contributing to male domestic violence. The lowest gender differential in self-assessed health was reported in urban Lahore. This is not surprising because of the higher educational and economic status of respondents in urban Lahore.

Significant regional and urban-rural differentials in self-assessed health were also found. Respondents in urban Bahawalnagar reported the best self-assessed health status among the four survey sites. Although income and education levels in urban Bahawalnagar are lower than those in urban Lahore, the tensions of intensive urbanization and crowding are probably less pronounced as well. Lahore, being a metropolitan district with a population density of over 3506 persons per km^2 compared with only 229 persons per km^2 in Bahawalnagar, presents a crowded environment that is likely to have a detrimental effect on the psycho-physical health of people. Owing to poor economic growth in recent years, coping with the high growth of national population has

become difficult, and coping with the even higher growth of population in cities due to rapid urbanization has become even more difficult. High population growth coupled with rapid urbanization has created insurmountable problems, contributing to poor psycho-physical health.

Gender differentials in self-assessed health are wider in rural than in urban areas. Women in rural areas suffer doubly, first, through to poverty and scarcity of health services, and secondly, through their low status. More than three-fifths of women in rural Bahawalnagar reported 'fair-to-poor' health compared to 17 percent of men, this being the highest relative gender difference in self-assessed health. It may reflect extreme poverty in rural Bahawalnagar. Poverty hits women harder than their dominating male counterparts, and accordingly women's health has suffered more than men's.

The fourth objective was to examine relationships between self-assessed health and the selected independent variables. Education, ages of respondents, caste, household incomes, usual health care provider, autonomy and security of women, the presence of adolescent children, and the congeniality of inter-spousal relationships were examined for their effect on self-assessed health. It appears that education plays an important role in improving the health of both males and females, but that the educational effect on women's health is smaller than that on men's. In Pakistan, most women, both educated and uneducated, have to do housekeeping and bear and rear children. They are under the direct control of men, and their education is allowed to play only a limited role in their lives.

Age has an inverse relationship with the self-assessed health of respondents. In general, the older the people, the poorer their self-assessed health status, which is expected, especially in a poor country. Apparently there is a greater negative effect of age on men's self-assessed health than on women's, especially in urban and rural Lahore. Being a metropolitan city, Lahore presents a complex and insecure social environment. Women in particular feel personally unsafe. During the present survey women in urban Lahore were reluctant to respond to interview calls for security reasons (see Section 3.11 in Chapter 3). The rural survey site in Lahore had a similarly insecure environment due to an adjacent industrial zone. Villagers resented women working in those factories, and

incidents of attacks on women were reported. These security issues are likely to have affected on the self-assessed health of women in urban and rural Lahore.

Caste appears to influence the self-assessed health of respondents. Arain men and women appear to have better self-reported health than the mainstream Rajput and allied castes. This caste differential may have links with eating habits and attitudes towards gender structures. Arain people traditionally are growers of fruits and vegetables. Their eating habits are expected to have been influenced by their traditional occupations and may have contributed to their better health status. Secondly, the Rajput and allied caste groups are more sensitive to the gender composition of their families than the other caste groups. They tend to have stronger biases against females than people belonging to other castes. In the present survey, more than three-fifths of respondents were from the Rajput or allied castes, and these respondents may have contributed to the high intensity of socio-cultural bias against females evident from Table 5.22 in Chapter 5.

Gender composition of children is important in the gender-sensitive culture of Pakistan. Parents want more sons than daughters. They are concerned about the marriage and security of female children. Dowry demands have almost certainly risen and marriages, especially of daughters, have become a significant social problem. Socio-cultural systems in Pakistan attach high value to the chastity and modesty of girls, and within the prevailing insecure social environment parents feel threatened and anxious about the safety of their young daughters. Larger proportions of parents with more daughters than sons reported 'fair-to-poor' health. Although this differential was statistically significant only in urban Lahore, it nevertheless points to an adverse effect of excess of daughters on the health of their parents. Qualitative data from FGDs with men and women support the argument that people consider daughters a burden, and practise socio-economic bias against females.

Autonomy of women is known to have links with their health. It is suggested that women's empowerment is likely to improve their health by enabling them to take decisions for their own welfare (Das Gupta 1995, Sathar and Kazi 1997, Ahmed ND). This may particularly be true in a male-dominated society like Pakistan. Larger proportions of women with low decision making autonomy reported 'fair-to-poor' health. The association was statistically significant only in urban Bahawalnagar, but suggests a

positive effect of autonomy on women's health. Mobility constraints on women may have a negative effect on their health. In the context of growing gender-based violence in the public domain, freedom of mobility among women was examined to look for any possible relationship with self-assessed health. In three of the four survey sites, slightly larger, though not significantly larger, proportions of secure than insecure women rated their health 'fair-to-poor'.

Congeniality of inter-spousal relationships is likely to have appreciable influence on the self-reported health of both males and females, but more so on that of females because they mostly are dominated and are the victims. In urban areas of the two districts, significantly larger proportions of women reporting tense relationships with their husbands reported 'fair-to-poor' health. This can be expected owing of the widespread occurrence of domestic abuse.

The fifth objective was to examine links between gender-differentiated concerns and health. The survey data did not show any significant association between gender-differentiated concerns and the health of respondents after controlling for other independent variables. However, data from focus group discussions, and from interviews with doctors in Lahore and Bahawalnagar, showed that parental health was adversely influenced by these concerns. Blood pressure and diabetes were named as having links with gender-differentiated concerns. Some people thought that the effect of these concerns depended upon the individual. However, a doctor in a FGD with doctors at the Department of Community Medicine, Allama Iqbal Medical College, Lahore said that such concerns induce physio-chemical changes, which in turn cause psychosomatic ailments.

8.1.3 Health Services Use and Health of Male and Female Children

The sixth objective was to assess household morbidity and mortality and the use of health care services by males and females. Gender differences are reported in food allocation and access to preventive health care services in South Asia, but differential survival of boys and girls is attributed to differential use of curative health care services (United Nations 1996). The survey data did not show significant differences in the use of health care services. However, ample qualitative information from FGDs and from

interviews with doctors suggested that parents do discriminate between male and female children when seeking health care services.

In-depth interviews with doctors showed that they were aware of parental discrimination in the use of health care services for female children. They reported gender-based discrimination both quantitatively and qualitatively. Most doctors reported that larger proportions of male than female children received treatment from their private practices. Similarly, hospital records showed that at least one-third more boys than girls aged 0-13 years received treatment from government hospitals in Lahore and Bahawalnagar Districts. Doctors in government hospitals were critical of parents' spending on medicines for their sons and daughters. They considered that parents were less willing to spend money on their daughters than on their sons. Similarly, data from FGDs with men in urban Lahore, women in rural Lahore, and men in rural Bahawalnagar suggested that poor parents do discriminate between their male and female children in seeking treatment. Focus group participants were reluctant to admit such gender-based discrimination, rather blaming it on the scarcity of female health care providers and on poverty.

Among infants, more boys than girls are reported to die because of the genetic composition of the two sexes. However, gender-based discriminatory health-seeking behaviours are responsible for better survival of boys than of girls aged 1-4 years. In poor regions and in rural areas, health care services are inadequate. When a medical complication arises, it becomes difficult to deal with given the available health care services. Many parents whose sons develop complications take them to city hospitals, but they may delay seeking such health services for their daughters. This probably is the root cause of lower survival of girls than boys at ages 1-4 years.

8.2 Discussion

This thesis is a cross-sectional study. While the research has facilitated assessment of gender dynamics in different geographic localities and can assist development of interventions that can reduce health differentials, its utility in exploring causal links hypothesized in Figure 2.1 is limited. Several findings nevertheless merit discussion.

The focus of this study is 'female health', and females can be divided into two major subgroups - children and adults. Chapter 6 focuses on adult women and on their general health. Based on the self-assessed health data collected from these women, women suffer from much more general ill-health than their male counterparts. Chapter 7 compliments this analysis by providing limited evidence of higher female morbidity and poorer female access to modern health care services. However, the limited data available do not show this general health disadvantage translating into higher adult female than male *mortality*, although it is possible that the mortality *advantage* enjoyed by adult females in most countries is comparatively muted in the case of Pakistani women.

The main contribution of Chapter 7, however, is the insight it provides into the health of female children, and especially younger ones. The hospital, health services use and qualitative data presented there, in conjunction with evidence from other surveys of relatively high female mortality at ages 1-4, paint a picture of female health disadvantage primarily in terms of a greater risk of death rather than of a higher level of general ill-health.

Thus a distinct contrast emerges whereby female children are at an unacceptably high risk not so much of becoming sick, but of death, while female adults are at an unacceptably high risk not of death, but of being in poor general health. The data show that female children are at higher risk of dying due to parental discrimination in terms of the health care services provided to their male and female children. On the other hand the poorer general health of adult females is the result of excessive childbearing, excessive domestic workloads, and cultural attitudes that confer a distinctly inferior status, and foster domestic violence, both physical and emotional. Such an environment and such social attitudes towards women damage their self-esteem, and thereby damage their psycho-social as well as their physical health.

Biologically, the female sex is considered stronger than the male sex, so that continuing greater mortality among young female children raises a serious question. In the present survey, no significant gender differential was found in reports of recent illness among children aged 1-4 years, yet more girls than boys were reported to have died. In view of these findings, it is imperative to isolate the mechanisms through which higher mortality among female than male children aged 1-4 occurs.

Qualitative and hospital evidence suggests that the primary mechanism is parental discrimination between sons and daughters in the acquisition of health care services, in terms both of their quality and their quantity. Largely, this discrimination probably is not intentional, but is located in parental belief that female children are biologically stronger than male children. The claim that 'daughters are robust; they do not die easily' was commonly encountered by field researchers. Part of the discrimination, however, is at least implicitly intentional. Parents are reluctant to acknowledge any overt discrimination based on gender, but doctors' experiences and hospital records clearly show differential health care practices for male and female children. Parents are overly concerned about the survival of their sons. Most have a very strong desire that sick sons should survive, and this desire dominates their health care-seeking behaviour. Parents are willing to spend much more to save a son than they would to save a daughter.

Because girls are believed to be strong, parents often delay obtaining treatment for them. Consequently, most doctors in both the private and public sectors reported that female children's ailments were frequently at comparatively advanced stages when they were brought for health care. These delays sometimes complicated medical problems, to the point, at times, of rendering them fatal.

An obvious question that arises concerns the reasons for gender discrimination in the acquisition of health care services for children. Once again, qualitative evidence suggests that parents are fretful about the futures of their young daughters due to the requirements of dowry and the possibility that they could enter marriages in which they are treated poorly by their husbands and in-laws. Such parental uneasiness is sometimes so overwhelming that some parents deem it best to let their daughters die quietly if they become sick. This can be inferred from qualitative data collected from doctors and discussed in Chapters 6 and 7, where physicians reported quite crude forms of health care discrimination between male and female children.

The findings of this study thus suggest that higher mortality among female than male children is at least partly induced by socio-cultural pressures that paint the former as potential sources of future trouble for their parents. Such attitudes probably prevail in all socio-economic strata, but especially among the low and lower-middle classes. Addressing the issue of dowry through legal measures to limit payments can deal with the

economic dimension of the problem to some extent. But finding a suitable spouse and combating fear of mistreatment after marriage remain significant sources of anxiety for parents of daughters.

The fact that people are more troubled about the future lives of their daughters than about those of their sons is instrumental in their differential health care-seeking attitudes. Because daughters are more of a source of potential problems for parents, their premature death is less of a tragedy. Parents' concerns about daughters are both intensive and extensive in nature. They are not concerned about daughters' employment, as they are about sons', but they feel anxious about their security, marriage prospects and marriage costs. They have a major concern over the economic impost of paying dowries for their daughters. A daughter's premature death thus represents a significant economic saving and a major reduction in psychological pressure to offset any grief they may feel. By contrast, the premature death of a son represents a dowry payment forgone, and hence a significant economic loss. These differential gender-based concerns are at the heart of the different social statuses of males and females, and people remain concerned about their daughters even after they are married.

A major mechanism through which gender differentials in adult health are generated is marital relations. Marital discord and the domestic violence to which it can give rise occur for several reasons, both economic and social. Marriage is an economically expensive proposition in Pakistan. Wedding ceremonies consume considerable parental economic resources, which frequently have to be borrowed. Due to this huge economic burden, a second marriage usually is unthinkable. Moreover, finding spouses for divorcees of either sex is difficult, but is especially so for women. Pakistani culture automatically lays the blame for a failed marriage primarily at the woman's feet. Divorce is considered a social scar for both sexes, but particularly for women. Accordingly, the social, psychological, and health consequences of divorce are far less serious for men than for women.

Self-assessed health was a key measure of health status. Double or more the proportions of women than of men at all survey sites reported their health 'fair-to-poor'. Self-rated health incorporates psycho-social aspects of people's health. That women rated their health poorer than their male counterparts rated theirs seems realistic. Pakistani

women delay seeking health care, and tend to consult doctors when ailments become serious. They do excessive work and bear large numbers of children, both of which impact their health negatively and make their often rating their health 'fair-to-poor' logical.

Secondly, in Pakistan, people believe that women are a naturally sicker sex, despite also believing that female children are biologically stronger. Although these two statements constitute something of a paradox, the poorer self-assessed health of women is widely attributed to them being naturally sicker. Macintyre *et al.* (1999) argue against the widely held belief that women report higher morbidity than men do, finding no gender difference in reports of chronic ailments. This finding, however, relates to developed countries, and poorer self-reported health by women in Pakistan actually captures their real health status.

Widespread domestic violence against women is an important contributor to their poorer self-assessed health. This argument receives support from the fact that only slightly larger proportions of females than of males from survey households were reported to have been ill during the month before interview. These illness episodes, however, were associated with health care seeking behaviour, and were not based on how they felt. A substantial proportion of domestic violence may take the form of physical abuse that is physically injurious to women's health. Almost certainly, though, psychological abuse arising from inter-spousal relationships has much more extensive deleterious consequences for women's self-assessed health. For example, women in Pakistan are constantly criticized and told that they are not performing up to the expected standard. They are blamed for the misdeeds and shortcomings of their children. Such social practices have a harmful impact on their self-esteem, and therefore on their self-assessed health.

The data from this survey show that more adult men than women had recently died, but the incidence of reported illness was higher among women than among men. This may be due to the childbearing role of women or to the social expectation of women being more sickly due to their menstrual biology. Such social attitudes result in women's ailments being neglected by women themselves, their families, and the larger society. In other words, such attitudes result in delay in acquiring health care services. Consequently

women keep suffering from various ailments and diseases. It might well be said of Pakistan that 'men die and women suffer from poor health'.

One of the major reasons for the poor health status of females is their low social status. In other words, the low status of women is a cause of their poor health. In light of this argument, it is essential to assess why females have lower social status than males. The fundamental reason lies in centuries-old cultural structures. The greater economic burden girls represent due to marriage-related expenses has contributed towards their low social status. Unjust implementation of government policies in the past has intensified those structures and produced further disadvantage for females, and has set back progress towards improving women's social status. The aims of many governmental actions and policies may have been to benefit women, but experience suggests that they generally have ended up creating further disadvantage for them.

In summary, the explanation for gender differentials in health in Pakistan is multi-faceted. A major factor is delay in the utilization of health care services for females, especially young girls. Adult women, on the other hand, suffer due to excessive child bearing, excessive household work, and abusive home environments. Women's self-esteem is undermined due to their low social and economic status, which are rooted in local social and cultural structures.

8.3 Conclusions and Recommendations

Female health in Pakistan is poorer than that of males because of their low social status. Therefore, the status of women is one of the major questions to be addressed. How does one address this culturally ingrained and socially sensitive question? There is no easy answer, but certain interventions may encourage progress in the right direction.

The low social status of females is the root cause of gender inequalities and inequities in Pakistan, and the low economic worth of females is at the heart of their low social status, although cultural aspects of low female status are also important. To address gender inequities, a multi-pronged strategy should be adopted. Employment among women should be promoted by employing local women to take up locally created job opportunities. For example, local women may be trained to work in local female health centres. This strategy will have its own management problems, but development of an

effective management system can help overcome these issues. Local socio-political sensitivities should be explored and researched in planning employment interventions. Local leadership, both formal and informal, should be taken into confidence before implementing such initiatives, but their political resistance should not deter such interventions. Effective official leadership with strong government support can help overcome any local political opposition.

Low education among females is an important social issue. School enrolment among females has improved but remains low. Education is an important correlate of social and economic status. Improved levels of education are expected to enhance women's status, autonomy, and initiative for their own welfare and that of their families. Schooling among females should be promoted with a strong political will. Free education and easy access to schools is important for improving female schooling.

Poverty is a major factor in the low rate of schooling among girls. During the 1960s, primary school children used to receive free 5 kg tins of *Ghee* (hydrogenated vegetable cooking oil) at regular intervals. This was an encouragement for poor parents to send their children to schools. Such a scheme should be revived in rural and poor urban areas for female children. Such incentives should be in addition to free schooling and books. Parents should be made to feel that they gain from daughters' schooling, rather than perceiving it as an economic burden. To encourage schooling among females, schools should be easily accessible and should be located within villages near large clusters of residents.

Gender-based security concern is a significant social issue and must be addressed by providing an adequate security environment for easy mobility of women and girls. People do not feel their women and girls are safe when out in public. Some parents have to spend additional resources on their daughters' commuting to schools and colleges (spending time to drop them off and pick them up or making special transport arrangements). General improvement in the security environment is required. However, provision of an adequate presence of police at times when females are travelling to and from schools should be the first step in this direction. Such a step may take some pressure off parents and families, and encourage some of them to send their girls to school. Females should feel safe in public. That is a minimal requirement to change their social

and economic status and consequently improve their health. Schools located within villages and close to clusters of population are also expected to encourage schooling among females.

Marriage and marriage-related expense is an important cause of the low status of females in Pakistan. Laws limiting dowry and feast expenses already exist, and their just implementation should be taken up. But these laws may not be very effective in the long run, because people will find ways to avoid them. Therefore, socio-cultural factors responsible for expensive weddings must be addressed. Simple ceremonies may be promoted by portraying simple but elegant ceremonies, possibly involving people from higher socio-economic strata. The media can play a significant role in promoting simplicity on such occasions.

Domestic violence against women is rampant, and influences their psycho-physical health badly. One of the major reasons for domestic violence lies in household economics. If poverty could be alleviated substantially, domestic violence is likely to decrease. Child socialization issues emerged as another source of tension between spouses. Improved school enrolment of children is likely to help reduce family violence. Social structures normally are rigid, and people do not readily accept change. Any change in social structures must be carefully planned. Awareness programs on this issue are vital. It is a highly sensitive cultural issue and it should be addressed with long and short-term goals. The long term strategy should include involving television networks in moulding social attitudes towards women and violence. With reference to short-term goals, legal and administrative measures may be adopted to discourage extreme violence against women, for example, by punishing culprits responsible for so-called kitchen or stove deaths according to the law. Legal sanctions against domestic violence should be strengthened and reinforced. The judiciary should not so readily find mitigating circumstances in such cases.

To bring about a conducive socio-legal structure to improve the status of females, different reports about women, such as the *Report of the Commission of Inquiry for Women 1997*, should be consulted and the socio-legal disadvantages faced by women noted. Having considered the recommendations in these reports, effective legislative and administrative measures should be devised to minimize socio-legal constraints on

women's emancipation. The RCIW (1997) has recommended changes to the Pakistani Constitution, women's political participation, citizenship rights, family laws, labour and service laws, criminal laws, the 'Qanun-e-Shahadat 1984' (law of evidence), development rights of women, and violence against women. Although all these recommendations are important and have potential for helping improve the socio-legal status of women in Pakistan, the recommendation on violence against women should be taken up immediately as a first step. The recommendation reads:

> Specific legislation on domestic violence by husbands or in-laws should be enacted, after further deliberation, clearly spelling out cruelty as a criminal offence. Such definition should include mental cruelty, continuing harassment, threats and simple injuries, as well as the more serious forms of violence. ... Immediate and clear directives should be issued to the police that all cases of domestic violence must be registered and prosecuted. There should be a monitoring body to check on effective implementation of this directive, as well as a media campaign to inform people about it (RCIW 1997:140).

This legislative and administrative change should be adopted, implemented, and publicized immediately. Such a step is likely to influence the social mind and challenge rigid gender structures. It is likely to have negative consequences in the short term, due to probable destabilization of gender structures. The patriarchal mindset of some men may react and lead to violence against women. Any perpetrators should be dealt with sternly and effectively, to send a clear message of the commitment to change. The commitment and political will to implement such a strategy is essential to the emancipation of Pakistani females.

The burden of childbearing takes a heavy toll on the health of Pakistani women. Contraception should be promoted to lower the fertility burden of poor Pakistani women. There is an unmet need for contraceptive services, and easy access to locally available services would help satisfy women's contraceptive needs. The provision of these services may arouse socio-cultural sensitivities in certain parts of the country, which planning should take into consideration. Involving the private sector on a contract basis may be a worthwhile avenue to explore. These services should be effective, and emphasis should be placed on minimizing the chances of contraceptive failure. Successful establishment and effective use of these services will promote contraception through a demonstration effect. It is an intervention aimed at long-term improvement, but is sustainable.

The KAP (Knowledge, Attitude, and Practices) "study carried out in the late 1970s found a large and untapped male interest (68 percent) in using family planning" (AVSC 1997b:13). This male interest in controlling family size should be tapped. Easy availability of contraceptive services is likely to encourage some men to use them. Vasectomy has recently been introduced in the country. It should be promoted by increasing awareness programs about the availability of such a service. Secondly, men should be targeted to make them aware of the benefits of small families.

In the sex-segregated culture of Pakistan, females are shy of sharing their health problems with male health care providers. Women are reluctant to work in the health area owing to the uncongenial social environment. Pakistan has more doctors per thousand population than paramedics. Women's work in the health field should be promoted as a highly valued contribution to society. If a need for female health centres can be felt in Australia and other countries, entirely female-staffed health centres can be established in Pakistan as well, especially in rural areas. Maternal and Child Health (MCH) Centres already exist. The staff in these Centres should be exclusively female and the network ideally should be expanded to cover all rural areas. Outreach health care services should be established on a contract basis with the active participation of the private sector.

Delay in provision of obstetric care is the most important determinant of high maternal mortality in Pakistan. In some parts of the world, Maternity Waiting Homes have helped lower the incidence of maternal mortality. Services on this pattern could be established to overcome problems related to delays in obtaining obstetric care. Mobile outreach services in collaboration with the private sector may be a good way to start.

The robustness of the female sex is a socially ingrained misconception. Its serious implications are reflected in the parentally inspired low use of health care services by female children. Television is potentially an effective medium of social change in Pakistan. Soap operas and other TV programs can disseminate messages to modify the image of female robustness. Health care workers, being part of the same socio-cultural system, tend to have similar beliefs. They should be trained to understand the effect of culture on health care practices, and in how to promote better health care provision for female children.

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Appendix A

Questionnaire

Questionnaire*

Women's
Interview Schedule No

Gender Differences and Female Health in Contemporary Pakistan

1 Name of interviewer .....
1=Hafeez 2=Sajida 3=Rabiya 4=Amna 5=Ashbal
6=Ibrahim 7=Shazia 8= 9= 10=

2 Date (Day / Month / Year)

3 Field Site .....
Urban/Rural (Urban=1, Rural=2)

4 Respondent's name .....

Respondent's address .....

5 What is your caste? .....

6 What is your age (in completed years)? .....

7 What is your age at Marriage (years)? .....
(Interviewer: Probe and record correct age and age at marriage)

8 What is your religion?
1=Muslim 2=Christian 3=Hindu 4=Sikh 7=Other (specify) .....

9 What is your religious sect? .....
1=Sunni 2=Shia 3=Ahle Hadith 4=Deoband 7=Other (specify) .....

10 What is the source of water for hand and dish washing in your household?
1=Piped into residence 2=Public tap 3=Well with handpump 4=Well without handpump
5=River/Karez/Spring/Canal/Surface Water 7=Other (specify) .....

11 What is the source of water for drinking?
1=Piped into residence 2=Public tap 3=Well with handpump 4=Well without handpump
5=River/Karez/Spring/Canal/Surface Water 7=Other (specify) .....

12 Do you boil water for drinking purposes?
1=Yes 2=No 3=Yes, sometimes 4=When doctor advises 5=Seasonally

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* The questionnaire administered to male respondents was identical, except that questions 76-84 and 102-113 were exchanged.

13 What is the main construction material of the house? ☐
1=Pucca (Brick and cement) 2=Katcha (Mud and unbaked bricks) 7=Other (specify) _____

14 What kind of toilet facility your household have? ☐
1=Flush 2=Bucket 3=Pit 7=Other (Specify_____ 5=No facility

15 Does your family have?
1=Yes 2=No *(Interviewer: Write "1" or "2" in all the following boxes.)*

Electricity ☐ Waterpump ☐ Washing Machine ☐ Room cooler ☐

Radio ☐ Television ☐ Fridge ☐ Sui Gas ☐ Gas cylinder ☐

16 Does any member of your household own: ☐
1=Yes 2=No Bicycle ☐ Motorcycle ☐ Car/Van/Tractor

Education and Exposure

17 How many years did you go to school? ☐☐
(Interviewer: If no schooling, go to Q 24)

18 What kind of degree/diploma/certificate did you have? _____ ☐☐
00=None 01=Primary 02=Middle 03=Matric 04=FA 05=BA 06=MA 07=PhD
08=MBBS 09=B Engineering 10=LLB 11=MBA 12=Chartered Accountant 13=Diploma in _____

77=Other (specify) _____

	Dimension	Middle Year 6	College Year 11
19	Which year did you start going to school?	1 9	1 9
20	With whom did you go to school?		
21	What was the usual mode of transport to school?		
22	What was the distance to school from your home? (Kms)	.	.
23	How much time (minutes) it did take to go to school?		

(20) 1=Alone 2=Brother 3=Sister 4=Father 5=Mother 6=Servant/Driver 8=Schooll mates 7=Other (specify)_____
(21) 1=Walk 2=Tonga/Rehra 3=Other animal cart 4=Rickshaw 5=Car/Van/Tractor 6=Bus/Truck 7= Other (specify)_____
8=Motorcycle 9=Bicycle

24 *If schooling is 0-5 years, then ask:* can you read and understand a letter or newspaper easily, with difficulty, or not at all? ☐
1=Easily 2=With difficulty 3=Not at all 9=N/A
(Interviewer: If respondent can not read news paper, go to Q 27)

25 Can you write a letter? ☐
1=Yes 2=No 9=N/A

26 How frequently do you read a newspaper or magazine? ☐
1=Everyday 2=3-6 times a week 3=Once a week 4= Occasionally 5= Not at all

27 How frequently do you listen to radio? ☐
1=Everyday +1 hour 2=Everyday up to one hour 3=Three times a week 4=Occasionally 5=Not at all

28 How frequently do you watch TV? ☐
1=Everyday +1 hour 2=Everyday up to one hour 3=Three times a week 4=Occasionally 5=Not at all

Resident Sheet
(Information about Births)

(Interviewer: Please make sure to include still births as well)

Serial No	Start from the head of the family	Sex	Age (In completed years) / Age at death	Relationship of (name) to H/H head	Schooling (No of years)	Degree/ Diploma /certificate	Marital status	Occupation	Immunization status	Birth Place	Birth Attendant	Birth Status	Dead or Alive	Cause of death	Income Rs/Month from all sources
S No	Names	A		B		C	D	E	F	G	H	I	J	K	(Rupees Per Month)
1															
2															
3															
4															
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															

(A) 1=Male 2=Female (B) 01=Head 02=Spouse of head 03=Son or Daughter 04=Son or Daughter -in-law 05= Grandchild 06=Parent of head 07=Parent-in-law 08=Brother or sister 09=Other Relative 10=Adopted/Foster Child 11= Not Related (C) 00=None 01=Primary 02=Middle 03=Matric 04=FA 05=BA 06=MA 07=PhD 08=MBBS 09=B.Engineering 10=LLB 11=MBA 12=CA 13=Diploma in ———— 77=Other (specify) ————
(D) 1=Never married 2= Currently married 3=Widowed 4=Divorced 5=Separated (E) 01=Housewife 02=Student 03=Child/Infant 04=School Teacher 05=College teacher 06=Govt servant Grade 1-10 07=Govt servant Grade 11-15 08=Govt servant Grade 16 and above 09=Shop owner 10=Salesman 11=Mason/Brick layer 12=Tailor 13=Factory worker 14=Skilled worker 15=Construction labourer 16=Farm labourer 17=Peasant 18=Farm owner/Farmer 19= 20=
77=Other (specify) ————
(F) 1=Completed 2=Partly completed 3=Not at all 8=Don't know (G) 1=Home 2=MCH centre 3=Hospital 7=Other (Specify) ————
(H) 1=TBA 2=Relative 3=Nurse 4=Doctor 7=Other (specify) ————
(I) 1=Singleton 2=Twin 3=Multiple births (J) 1=Alive 2=Dead 3=Still birth (K) 1= 2= 3= 4=

Health and use of health services

	Question	Illness 1 (Codes)	Illness 2 (Codes)	Illness 3 (Codes)
30	How is your health in general? 1=Very good 2=Good 3=Fair 4=Sometimes good & poor 5=Poor 7= other (specify) ———			
31	Do you have any longstanding illness, disability, or infirmity? 1=Yes 2=No *(Interviewer: If no, go to Q 37)*			
32	What is this illness/disability? ——— ——— 9=N/A	Mon Yr	Mon Yr	Mon Yr
33	Since when did you have this illness? 9=N/A			
34	In your opinion, what is the cause of this problem/disease? 1=Accident 2=Genetic 3=Psychosomatic/Tension/Anxiety 7=Other (specify) ——— ———			
35	According to doctor's view, what is the cause of this problem/disease? 1=Accident 2=Genetic 3=Psychosomatic/Tension/Anxiety 7=Other (specify) ——— ———			
36	Does this illness limit your activities any way? 1=Yes 2=No			
37	In addition to the above, which of the following problem(s)/ illness(s)/disease(s) do you usually complain/feel about? *(Interviewer: Please tick multiple responses, if given)*			
38	In your opinion, what is the cause of this problem/illness/disease? 1=Accident 2=Genetic 3=Psychosomatic/Tension/Anxiety 7=Other (specify) ——— ———			
39	According to doctor's view, what is the cause of this problem/illness/disease? 1=Accident 2=Genetic 3=Psychosomatic/Tension/Anxiety 7=Other (specify) ——— 9=N/A or never consulted			
40	Do you take any medicine/treatment for this (relevant) problem/illness? 1=Yes 2=No 3=Yes, sometimes			
41	What is this medicine/treatment? *(Interviewer: Please get the name of the medicine/treatment)* 9=N/A			
42	In your daily routine life, do you take any medicine(s)/medication regularly? 1=Yes 2=No			
43	What is this medicine/medication? (Interviewer: Please get and note down the name of medicine/medication)			
44	In addition to what you have mentioned before, for any reason, during the last 30 days, did you or any member of your family see any health provider? 1=Yes 2=No			
45	What was the qualification of that health provider(s)			
46	For whom in the family the health provider was seen? Name ———	S No	S No	
47	What is the reason for consultation? ——— (Interviewer: Write down the precise reason)			
48	Do/did you or your spouse use any family planning method? 1=Yes 2=No	Respondent	Spouse	
49	What method(s) do/did you or your spouse use?	Resp	Spouse	

(37) 1=stomach ulcer 2=Diarrhoea 3=Diabetes 4=Cancer 5=Heart Disease 6=Arthritis 7=Blood Pressure 8=Headache 9=Neckache 10=Legache 11=Bakache 12=Depression 13=Acidity 14=Gas 00=None 77=Other (specify) ———

(45) 1=MBBS doctor 2=Dispenser 3=Chemist 4=Homeopath 5=Hakim 6=*Maulvi* 7=*Pir/Faqir* 8=Govt Hospital 9=RHC 10=BHU 11=MCH 12=Private clinic/Private hospital 77=Other (specify) ——— (49) 1=Pill 2=IUD 3=Injection 4=Diaphragm/Jelly/Foam 5=Condom 6=Female sterilization 8=Male sterilization 9=Abstinence/Wi'Withdrawl 7=Other (specify) ———

50 Usually where do you go for medical help/treatment? ☐
1=MBBS doctor 2=Unqualified doctor 3=Dispenser 4=Chemist 5=Homeopath 6=Hakim 8=Maulvi 9=Pir/Faqir
7=Other (specify)————————

51 How satisfied are you with the above mentioned (Q 50) health facility or health provider? ☐
1=Highly satisfied 2=Moderately satisfied 3=Satisfied 4=Dissatisfied 5=Highly dissatisfied

52 In an emergency, where do you go for medical help? ☐☐
1=MBBS doctor 2=Dispenser 3=Chemist 4=Homeopath 5=Hakim 6=Maulvi 7=Pir/Faqir 8=Govt Hospital
9=RHC 10=BHU 11=MCH 12=Private clinic/Private hospital

Morbidity

53 During the last one month, did anybody get sick in your family? ☐
1=Yes 2=No *(Interviewer: If no, go to Q 55)*

54 Who got sick?

	Dimension	Sick person 1	Code	Sick person 2	Code	Sick person 3	Code
A	Name ———— (Interviewer: Write Serial No from Resident Sheet)						
B	Sex 1=Male 2=Female						
C	What were the symptoms?						
D	Who noticed these symptoms first?						
E	Whom (name of first noticer) talked (consulted) to in the family?*						
F	What did the 2nd person (name) said/did in response to the prompt of first noticer (name)? 9=N/A						
G	Did any body suggest to wait and see? 1=Yes 2=No If no, go to Q 'K'						
H	What did he/she say?						
I	Who suggested to wait? (Write S No from Res Sheet)	Name		Name		Name	
J	How long waited? (Write No of days) 9=N/A						
K	Where did you take him/her?						
L	Did he/she get well?1=Yes 2=No (Interviewer: If yes, go to Q 49)						
M	How much money was paid? (Rupees)						
N	What was done when he/she did not get well from 1st source/ where was he/she taken to?						

(C) 01=Cough 02=Fever 03=Cough+Cold+Fever 04=Difficulty in breathing 05=Diarrhoea 06=Vomiting 07=Injury/wound/rash 08=Pneumonia 77=Other (specify) ————————

(D&E) 01=Patient himself/herself 02=Mother 03=Father 03=Mother-in-law 04=Father-in-law 05=Sister-in-law 06=Brother-in-law 08=Brother 09=Sister 10=Son 11=Daughter 12=Husband 13=Wife 14=Friend/Neighbour 15= 16= 20=Health provider 77=Other (specify) ———————— (K & N) 1=MBBS doctor 2=Dispenser 3=Chemist 4=Homeopath 5=Hakim 6=*Maulvi* 7=*Pir/Faqir* 8=Govt Hospital 9=RHC 10=BHU 11=MCH 12=Private clinic/Private hospital 13=Did not do any thing/Left it to *Allah* (God) 14=Self medication 77=Other (specify) ———— 99=N/A

** Interviewer: If she did not talk to any body and took or did not take any action, go to question "K".*

Mortality

55 Did anybody in your family, God-forbid, passed away during the last 2 years? ☐
1=Yes 2=No *(Interviewer: If no death, go to Q 57) Note: Please include still births as well*

56 Who died?

	Dimension	Death 1	Code	Death 2	Code	Death 3	Code
A	Name?						
B	Sex? 1=Male 2=Female						
C	Age at death *(Interviewer: Record years, months, and days)*	Years Mon Days		Years Mon Days		Years Mon Days	
D	In your opinion, what was the nature of disease or reason of death?						
E	According to the doctor's view, what was the fatal disease or reason of death?						
F	How long he/she remained ill before death? (# days)						
G	In your view, was there any way, he/she could have been saved?						

(D & E) 01=Cough 02=Fever 03=Cough+Cold+Fever 04=Difficulty in breathing 05=Diarrhoea 06=Vomiting 07=Injury/wound/rash 08=Pneumonia 09=TB 10=Heart attack 11=Kidney failure 12= 13= 14= 15= 16= 17= 18=
77=Other (specify) _____ 88=Don't know
(F) 1=If taken to hospital sooner 2=If transport was available 3=If God willing 4=If we had not delayed action 5=If doctor had given good treatment 6=If we had been lucky 7=Other (specify) _____

Gender Differences

57 If you have another child, would you pray from Allah to have a daughter, son, or either sex? ☐
1=Son 2=Daughter 3=Either sex 4=Sterilization 5=Menopause 6=No desire for more children
(Interviewer: Even if the respondent says that children's sex is determined by God, still ask what does she desire or what does she pray from God). If the respondent pray for either sex, then go to Q 59)

58 Why do you pray for a daughter / son? ☐
1=Daughters are a burden/liability 2=Daughters go away after marriage 3=Boys/girls both provide support
4=Daughters are help to mothers in home chores 5=Daughters provide emotional support to parents
6=Daughters are necessary for family making 8=Brother(s) need(s) sister(s) 9=N/A 7=Other (specify)_____

59 Which sex do/did you desire for your first child? ☐
1=Male 2=Female 3=Either sex
(Interviewer: If the respondent pray for either sex, then go to Q 61)

60 Why do/did you want daughter/son? _____ ☐

_____9=N/A

61 Which sex do/did you desire for your second child? ☐
1=Male 2=Female 3=Either sex
(Interviewer: If the respondent pray for either sex, then go to Q63)

62 Why do/did you want daughter/son? _____ ☐

_____9=N/A

63 In your view, on the average, what level of education is good for your boys & girls? Boys ☐☐ Girls ☐☐

00=None 01=Primary 02=Middle 03=Matric 04=FA 05=BA 06=MA 07=PhD 08=MBBS 09=B.Engineering 10=LLB 11=MBA/CA 12=Armed forces officer 13= 14= 15= 16 17= 20=Diploma in _____ 77=Other (specify) _____

(Interviewer: Please specify and name it)

(Interviewer: If desired schooling for boys and girls is the same, then go to Q 65)

64 Why would you like lower/higher/different level of schooling for girls than boys? ☐☐☐

1=Girls have to take up the kitchen 2=Girls don't work outside 3=Girls go astray 4=Father doesn't like girls schooling 5=Girls are to become mothers/Girls have to raise/train children 6=Boys need employment/work outside 8=Disruption in life 9=N/A 7=Other (specify) _____

(Interviewer: Tick multiple responses, if given)

Schooling

65 Does any one from your family go to school/college/university? If yes, please let me know his/her/their names? ☐

1=Yes 2=No *(Interviewer: In case no body from this family goes to school, then go to Q 64)*

Please give me names of the children who go to school/college/university from your family.

	Dimension	Person 1	Person 2	Person 3	Person 4	Person 5	Person 6	Person 7	Person 8	Person 9
A	Names									
B	Sex									
C	Serial No from Resident Sheet									
D	Does he/she go to school alone or with some body									
E	Which grade/class he/she is in?									
F	Distance to school from home (Kms)	.	.	.	.	.	.	.	.	.
G	Mode of traasport									
H	Time taken to go to school (minutes)									
I	What is his/her school fee?									
J	If taking tuition, what is his/her total tuition fee(s)?									
K	Total monthly cost on his/her books/stationery									
L	Total monthly expenses on his/her transport									
M	Total monthly expenses on his/her pocket money									
N	Upto what level you want him/her to study									

(D) 1=Alone 2=With brother 3=With father 4=With mother 5=With servant 6=With friends 7=Other (specify)_____

(E&N) 00=None 01=Primary 02=Middle 03=Matric 04=FA 05=BA 06=MA 07=PhD 08=MBBS 09=B.Engineering 10=LLB 11=MBA/CA 12=Armed forces officer 13= 14= 15= 16 17= 20=Diploma in _____ 77=Other (specify) _____

(F) 1=Walk 2=Tonga/Rehra 3=Other animal cart 4=Rickshaw 5=car 6=Van/Bus/Truck 8=Motorcycle 9=Bicycle 7=Other (specify)_____(I) 000=No tutoring 999=Tutioning but no fee

66 Is/are some of your children between 5-15 years who do not go to school? ☐

1=Yes 2=No

(Interviewer: If no, go to Q 68)

67 Please give me names of all the persons in your family between 5-15 years who do not go to school?

	Dimension	Person 1	Person 2	Person 3	Person 4	Person 5	Person 5
A	Names						
B	S No from Resident Sheet						
C	Sex 1=Male 2=Female						
D	Serial No from Resident sheet						
E	Did he/she finish schooling as planned or dropped out? 1=Yes, finished as planned 2=No, dropped out						
F	Why did he/she drop out? *(Interviewer: Please ask reasons for dropping out from school/college?*						

Marriage

68 What was the relationship between you and your spouse before marriage? ☐
1=First paternal cousin 2=First maternal cousin 3=Second paternal cousin 4=Second maternal cousin
5=Extended family relative 6=Distant relationship 7=Other (specify) ———————
8=Out of Biradri but same caste 9=Out of caste/clan

69 At the time you got married, the SES of your spouse's family was higher/lower/same than your family's SES at that time? ☐
1=Higher 2=Lower 3=Same

70 For your boys and girls, would you prefer to find a match among relatives, within clan or any suitable person? ☐ Boys ☐ Girls
1=First paternal cousin 2=First maternal cousin 3=Second paternal cousin 4=Second maternal cousin
5=Extended family relative 6=Wherever suitable match is available 7=Other (specify)———————
8=Out of Biradri but same caste 9=Out of caste

71 Why? ——————————————————— ☐
———————————————————

72 Would you like to seek the consent of his/her regarding the probable match before making a decision? ☐ Boys ☐ Girls
1=Yes 2=No, in our family, we don't seek the consent/approval of children
3=Yes, we will seek consent for boys only 4=No, in our family, we don't seek the consent/approval of daughters 9=N/A

73 What do you think is the ideal age for marriage (number of years)? ☐☐ Boys ☐☐ Girls
(Interviewer: If the respondent does NOT have boy and or girl child(ren), still ask and seek the opinion about age)

74 Are some of your children already married? ☐
1=Yes 2=No
(Interviewer: If no child married, go to Q 76)

75 What is/are his/her/their name(s)?

	Dimension	Marriage 1	Code	Marriage 2	Code	Marriage 3	Code	Marriage 4	Code	Marriage 5	Code
A	Name? ($ No from Res Sheet)										
B	Sex? 1=Male 2=Female										
C	Age at marriage?										
D	Married to?										
E	Did you seek consent/approval of the bride/bridegroom before engagement?										
F	Did any body resist this match? 1=Yes 2=No										
G	Who was him/her?	Name		Name		Name		Name		Name	
H	Why did he/she resist?										
I	Did you borrow some money for this wedding? 1=Yes 2=No										

(D) 1=First paternal cousin 2=First maternal cousin 3=Second paternal cousin 4=Second maternal cousin 5=Extended family relative 6=Distant relationship 7=Other (specify) 8=Out of Biradri but same caste 9=Out of caste
(E) 1=Yes, he/she readily agreed 2=First he/she did not agree but later agreed 3=No, he/she did not agree but we went ahead 4=In our family, we don't seek the consent/approval of children 5=In our family, we don't seek the consent/approval of sons
6=In our family, we don't seek the consent/approval of daughters 8=In our family girls don't talk about these things 9=In our family boys and girls both don't talk about these things
(G) 01=Father 02=Mother 03=Brother 04=Sister 05=Father-in-law of my son 06=Father-in-law of my daughter 07=Mother-in-law of my son 08=Mother-in-law of my daughter 09=Paternal uncle 10=Maternal uncle 11=Brother-in-law 12=Sister-in-law 13=Grand father 14=Grand mother 15=Friend 17=Other relative (specify) _____
(H) 01=Wanted to marry in his/her immediate family 02=Did not like the would be family 03=The boy was older 04=The girl was older 05=The boy was not educated enough 06=The girl was not educated enough 08=The boy was not handsome 09=The girl was not pretty 07=Other (specify) _____

Freedom/Autonomy

76 How frequently do you buy groceries yourself? ☐
1=Always/Usually 2=Sometimes 3=Occasionally 4=Never

77 How frequently do you buy child(ren) clothing yourself? ☐
1=Always/Usually 2=Sometimes 3=Occasionally 4=Never

78 How frequently do you buy your clothing yourself? ☐
1=Always/Usually 2=Sometimes 3=Occasionally 4=Never

79 How frequently do you decide to buy durables like washing machine/fridge etc? ☐
1=Always/Usually 2=Sometimes 3=Occasionally 4=Never

80 How frequently do you have to account for the money you get in routine? ☐
1=Always/Usually 2=Sometimes 3=Occasionally 4=Never

81 Do you have your own bank account? ☐
1=Yes 2=No 3=Had in the past but not now

82 What do you use for *purdah*, when you go out of your neighbourhood? ☐
1=Burqa 2=Chadar 3=Dopatta 4=Scarf 5=Nothing (I don't observe purdah) 7=Other (specify) _____

83

	Dimension	Is/was it acceptable to your husband/father that you could go alone to the following places?		Is/was it acceptable to your husband/father that your daughters could go alone to the following places?		Is/was it acceptable to you that your daughters could go alone to the following places?	
	Place	Now	20 years ago	Now	20 Years ago	Now	20 Years ago*
A	Local health centre						
B	Local market/shop						
C	Visiting relatives						
D	Fields outside village						
E	Community centre						
F	Fair/Shrine						
G	Next village						

(A to G) 1=Yes 2=No
* *(Interviewer: Ask hypothetically, if she did not have daughters 20 years ago or they were too small for this question)*

84

	Dimension	Do you feel comfortable to take the following alone? (Local Travel)		Does your husband feel comfortable that you could take the following alone? (Local Travel)		Do you feel comfortable that your daughters could take the following alone? (Local Travel)		Do your daughters feel comfortable to take the following alone? (Local Travel)	
	Vehicles	Now	20 years ago	Now	20 years ago	Now	20 Years ago	Now	20 Years ago*
A	Bus/van								
B	Taxi/Rickshaw								
C	Tonga								

(A to C) 1=Yes 2=No
* *(Interviewer: Ask hypothetically, if she did not have daughters 20 years ago or they were too small for this question)*

Religiosity

85 How many times a day, do you pray? ☐
1=5 times a day 2=3-4 times a day 3=1-2 times a day 4=Friday prayers only 5=Occasionally 6=Not at all

86 How frequently do you recite Holy Quran? ☐
1=Everyday 2=3-6 times per week 3=1-2 times per week 4=Occasionally 5=Not at all 6=I can't read Holy Quran

87 Do your spouse pray? ☐
1=Regularly 2=Sometimes 3=Occasionally 4=Friday prayers only 5= Not at all

88 Do your spouse have beard? ☐

89 Does your spouse recite Holy Quran? ☐
1=Regularly 2=Sometimes 3=Occasionally 4=Fridays only 5=Not at all 6=He can't read Holy Quran.

		Boys		Girls	
		Regularly	Sometimes	Regularly	Sometimes
90	How many of your children pray?				

(Interviewer: Write No of children who pray sometimes. For more than 9, write 9) 9=Have small children (N/A)

91 Did you ever hear/learn that a husband is his wife's *Majazi Khuda* (worldly god)? ☐
1=Yes 2=No *(Interviewer: If no, go to Q 94)*

92 How old were you then? ☐☐ Years

93 Where from did you first learn/hear about it? ☐
1=School 2=Mosque/Religious books 3=Father 4=Mother 5=Husband 6=Friends 8=Elders
9=Radio/TV/Newspaper 7=Other (specify) ———————

94 Do you know the meaning of '*Majazi Khuda*'? ☐
1=Yes 2=No
(Interviewer: If no, go to Q 96)

95 What does it mean? ——————— ☐

———————

96 Did your spouse ever share/discuss/tell that he is your *Majazi Khuda*? ☐
1=Yes 2=No

97 Why did he tell/share/discuss that with you? ——————— ☐

———————

98 Did you ever learn/hear that when female children get sick, they normally survive and rarely die while male children are feared to die? ☐
1=Yes 2=No *(Interviewer: If no, go to Q 100)*

99 Where from did you first learn/hear about it? ☐
1=Mother 2=Father 3=Other elders 4=Friends 9=N/A 7=Other (specify) ———————

100 Do you personally believe in it? ☐
1=Yes 2=No

101 In your view, do some parents delay medical treatment for girls due to such beliefs? ☐
1=Yes 2=No

Employment

102 As you know some women take up jobs for which they are paid in cash or kind. Others sell things, or have a small business. Are you currently doing any of these things or any gainful other work? ☐
1=Yes 2=No *(Interviewer: If no, go to Q 106)*

103 In your current work, do you work for a member of your family, for someone else, or are you self employed? ☐
1=For family member 2=For government 3=Private job 4=Self employed 9=N/A 7=Other (specify) ———————

104 What is your occupation, that is what kind of work do you do? ☐☐
01=Housewife 02=Student 03=Child/Infant 04=School Teacher 05=College teacher
06=Govt servant Grade 1-10 07=Govt servant Grade 11-15 08=Govt servant Grade 16 and above 09=Shop owner
10=Saleman 11=Mason/Brick layer 12=Tailor 13=Factory worker 14=Skilled worker 15=Construction labourer
16=Farm labourer 17=Peasant 18=Farm owner/Farmer 19= 20=
77=Other (specify) ——————— 99=N/A

105 How much do you earn per month from this work? ☐☐☐

106 Did you work any time before you (first) got married? ☐
1=Yes 2=No *(Interviewer: If no, go to Q 112)*

107 How old were you when you first started working (years)? ☐☐
9=N/A

Gender Based Stress

122 To what extent, are you worried regarding your boy(s) and or girl(s) about the following:
1=Extremely 2=Highly 3=Moderately 4=Little 5=Not at all

	DIMENSION	SONS (WRITE 1 TO 5)	ANY PERCEIVED RELATIONSHIP WITH YOUR HEALTH		DAUGHTERS (1-5)	ANY PERCEIVED RELATIONSHIP WITH YOUR HEALTH	
			PHYSICAL 1=YES	MENTAL 2=NO		PHYSICAL 1=YES	MENTAL 2=NO
A	Educational performance						
B	Educational expenses						
C	Transportation to school						
D	Religious education						
E	Security, when gone to school						
F	Security, at home						
G	Modesty, when gone to school						
H	Modesty, at home						
I	Modesty, when gone to bazar/market						
J	Match finding						
K	Marital adjustment						
L	Wedding expenses						
M	Employment						
N	Morality						
O	Falling astray						
P	Drug abuse						
Q	Health						

123 Which of the above mentioned concern(s)/worry(ies), in your opinion, have relationship with your physical ailment(s)? _____

_____

124 Interviewer Observations and comments: _____

_____

_____

_____

Any research related sayings: _____

_____

_____

Appendix B

Supplementary Tables

Table B1 Age distributions of household populations by region, urban-rural residence and gender

	Lahore				Bahawalnagar			
	Urban		Rural		Urban		Rural	
Age	M	F	M	F	M	F	M	F
0-4	5.3	6.6	10.8	9.6	10.8	10.9	9.4	11.1
5-9	12.2	12.0	18.1	17.6	17.8	17.3	18.3	17.7
10-14	17.3	14.9	15.0	14.5	15.6	17.3	15.5	16.5
15-19	14.6	13.1	12.1	11.5	12.1	12.2	13.2	13.5
20-24	10.1	10.7	8.5	10.0	8.9	8.9	8.9	8.0
25-29	5.3	8.8	5.6	6.8	5.4	7.1	6.2	7.9
30-34	3.7	9.1	5.2	6.7	5.6	6.8	5.6	6.9
35-39	6.6	7.1	6.8	9.2	6.8	7.5	5.2	5.6
40-44	6.3	6.4	5.1	4.2	5.6	4.8	4.5	5.4
45-49	6.9	6.1	4.8	4.9	5.1	5.3	4.7	4.4
50+	11.6	5.2	8.0	4.9	6.4	1.9	8.6	3.0
Total	100	100	100	100	100	100	100	100
N	**1614**	**1535**	**1211**	**1086**	**1523**	**1422**	**1526**	**1382**

Source: GDFHS 1998 M=Male F=Female

Table B2 Education levels of household populations by region, urban-rural residence and gender

	Lahore				Bahawalnagar			
	Urban		Rural		Urban		Rural	
Years of schooling	M	F	M	F	M	F	M	F
None	13.4	18.9	46.5	67.2	32.1	45.5	60.0	78.2
1-5	18.9	19.0	30.5	22.9	29.8	25.5	25.2	15.6
6-8	12.9	12.8	11.1	5.9	13.2	10.8	6.8	2.9
9-10	12.3	15.2	7.4	1.9	14.7	10.7	5.9	2.1
11-14	28.1	25.8	3.5	1.4	8.3	6.0	2.0	1.1
15+	11.4	8.3	1.0	0.6	1.9	1.5	0.3	0.1
Total	100	100	100	100	100	100	100	100
N	**1618**	**1536**	**1214**	**1087**	**1521**	**1408**	**1521**	**1369**

Source: GDFHS 1998 M=Male F=Female

Table B3 Odds ratios showing relative levels of 'fair-to-poor' health across selected variables for logistic regression models defined by region and urban-rural residence: full models

	Lahore		Bahawalnagar	
	Urban	**Rural**	**Urban**	**Rural**
Predictors				
Sex of respondents				
Male	ref	ref	ref	ref
Female	.083**	.071*	0.29*	0.11***
Schooling				
Uneducated	ref	ref	ref	ref
Educated	0.75	0.53*	0.61	0.61
Age	***	***	***	***
<35	ref	ref	ref	ref
35-44	1.35	1.73	1.27	1.55
	3.07***	2.91*	2.86**	3.77***
45+	5.18***	7.9***	37.26**	7.16**
Caste	***		***	
Kashmiri	068	2.36	0.00	0.00
Arain	0.75	0.78	.24***	1.34
Rajput/Sub-castes	ref	ref	ref	ref
Sheikh	2.17*	0.33	2.65	0.81
Syed	1.82	0.88	0.51	4.79
Occupational castes	0.01	0.73	0.19*	1.16
Other castes	1.04	1.54	0.74	0.79
Income (Rs/Month)				
<5000	ref	ref	ref	ref
5000+	1.11	0.64	0.71	0.59
Gender balance of children				
Equal or more sons	ref	ref	ref	ref
More daughters	1.58*	0.86	0.98	0.74
Occupation		*		
White-collar	ref	ref	ref	ref
Housewife	0.33	1.27	1.36	1.38
Self-employed	0.45*	1.08	0.49	0.68
Skilled workers	1.06	2.16	1.05	1.24
Unskilled workers	0.34	3.29	0.61	1.05
Other	.056	5.81	0.00	1.01
N	**517**	**334**	**431**	**417**

Source: GDFHS 1998 M=Male F=Female * p<.05 ** p<.01*** p<.001

Table B4 Odds ratios showing relative levels of 'fair-to-poor' health across selected variables for logistic regression models defined by region, region, urban-rural residence and gender: full models

	Lahore				Bahawalnagar			
Predictors	**Urban**		**Rural**		**Urban**		**Rural**	
	M	**F**	**M**	**F**	**M**	**F**	**M**	**F**
Schooling								
Uneducated	ref	ref	ref	ref	ref	ref	ref	ref
Educated	0.45	0.99	0.61	.37	0.51	0.54	0.52	0.39
Age	***		**			**		*
<35	ref	ref	ref	ref	ref	ref	ref	ref
35-44	7.94*	1.18	1.82	2.40	0.97	1.74	1.09	2.22*
45+54	21.12**	2.01	3.80*	1.80	2.05	4.32**	3.24*	4.31**
55+	33.38**	3.28	18.33***	1.55	a	28.66**		a
Caste								
Kashmiri	0.80	0.54	0.96	0.0	0.00	0.00	None	0.00
Arain	0.61	0.82	0.46	1.27	0.00	0.30**	0.71	2.24
Rajput/Sub-castes	ref	ref	ref	ref	ref	ref	ref	ref
Sheikh	2.98*	1.19	0.00	2.24	2.31	2.09	0.89	1.18
Syed	2.04	1.37	0.91	0.79	0.00	0.68	3.47	a
Occupational castes	0.00	none	0.26	3.15	3.05	0.13*	0.32	1.29
Other castes	0.79	0.81	1.40	1.32	0.52	1.11	0.99	0.51
Income (Rs/Month)								
<5000	ref	ref	ref	ref	ref	ref	ref	ref
5000+	1.45	0.98	0.63	0.55	0.68	0.66	2.17	0.42*
Gender composition of family								
Equal or more sons	ref	ref	ref	ref	ref	ref	ref	ref
More daughters	2.38**	1.38	0.71	1.54	1.36	0.67	0.82	0.65
Occupation			**					
White-collar	ref	NA	ref	NA	ref	NA	ref	NA
Self-employed	2.15*	NA	0.79	NA	2.02	NA	3.45	NA
Skilled workers	2.30*	NA	2.22	NA	1.69	NA	1.41	NA
Unskilled workers	0.71	NA	3.51**		1.02		1.54	
Other	1.34	NA	10.69**	NA	0.00	NA	3.14	NA
Freedom of mobility								
Low	NA	1.96*	NA	2.55	NA	0.94	NA	.91
Medium	NA	1.15	NA	1.03	NA	1.03	NA	.82
High	NA	ref	NA	ref	NA	ref	NA	ref
Autonomy								
Low	NA	1.44	NA	3.84	NA	0.78	NA	0.62
Medium	NA	1.39	NA	14.3*	NA	1.17	NA	0.72
High	NA	ref	NA	ref	NA	ref	NA	
Security								
Insecure	ref	ref	ref	ref	ref	ref	ref	ref
Secure	NA	0.59	NA	4.29	NA	0.58	NA	.22**
N	**272**	**253**	**205**	**132**	**226**	**209**	**234**	**185**

Source: GDFHS 1998 M=Male F=Female * p<.05 ** p<.01*** p<.001

a >100 because of the concentration of less than 10 cases

APPENDIX C

FGD GUIDE

Study objective: The objective of the study is to examine gender differences in relation to their effect on health, especially that of females.

1. **Is there any difference between the health of male and female children?**

2. **What are some of the major factors which affect the health of males?**

3. **What are some of the major factors which affect the health of females?**

4. **Do you observe any differences between males and females in the community regarding health services use? What are those differences, if any?**

5. **In your view, what are the ideal levels of education for sons and daughters.**

6. **In your view, what are the ideal ages at marriage for sons and daughters.**